

# **BOARD OF SUPERVISORS WORK SESSION AGENDA**

**GOVERNMENT CENTER BOARD ROOM**

**OCTOBER 23, 2007 - 4 P.M.**

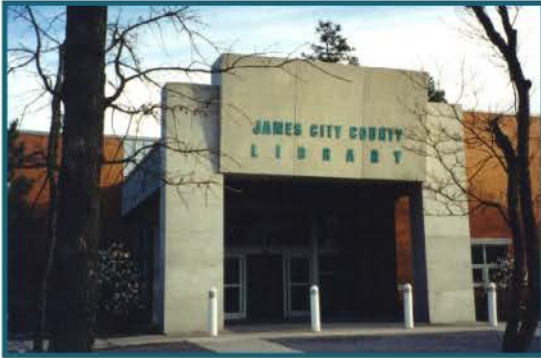
**A. Call to Order**

**B. Roll Call**

**C. Board Discussions**

1. Williamsburg Regional Library Board of Trustees
2. Introduction to the Devolution of Secondary Roads  
(Memorandum) (Attachment) (Report)
3. Energy Conservation Initiatives

**D. Adjournment**



**WILLIAMSBURG REGIONAL LIBRARY**

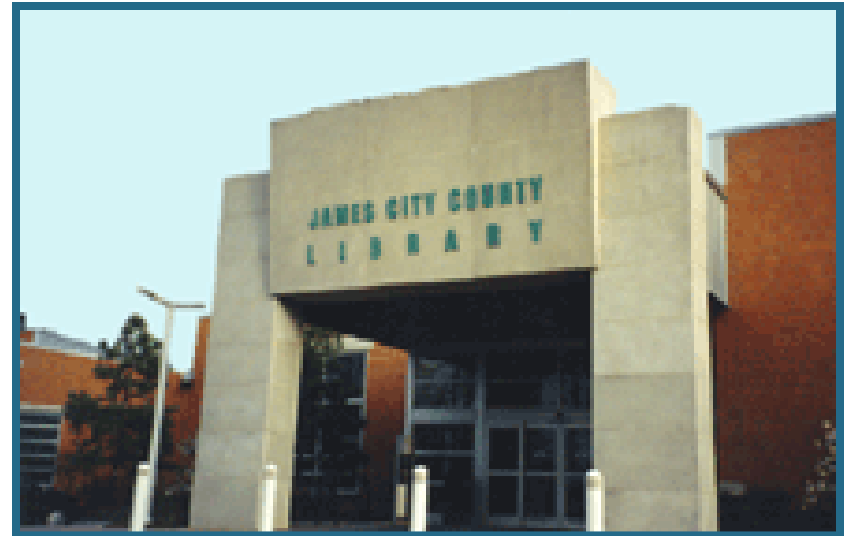
# Williamsburg Library

- 181,000 volumes
- 40,000 square feet
- Built 1973
- Expanded 1982
  - Theatre and Children's library
- Expanded 1998
  - Circulation area and Adult Services



# James City County Library

- 154,000 volumes
- 35,000 square feet
- Built 1996



# Mobile Library Services

- Weekly schedule
- 38 stops
  - Neighborhoods
  - Child care centers
  - Convalescent homes
  - Shelters
- Staff present programs
  - Storytimes
  - Crafts
  - Other activities



# User Comments

...Every Williamsburg resident I've talked to agrees that this community has an extraordinary library system, from the Gab Bags to the DVDs to the theater with its eclectic blend of performances. I've been lucky enough to live

within walking distance of this wonderful library! Thanks for all you do.



Sincerely,  
Carol Scott  
*Letter dated March 5, 2007*



# Staff Recognition

- Individual Awards
  - Barry Trott
    - Allie Beth Martin Award - PLA
    - Margaret Monroe Library Adult Services Award
  - Michael J. Fox
    - Outstanding Library Trustee - VPLDA
  - Noreen Bernstein
    - George Mason Award - VLA



# Library Recognition



- Departmental Awards
  - Adult Services
    - Outstanding Service Innovation - Gab Bags
  - Youth Services
    - Outstanding Children's Program - Summer Reading Art Show
    - Whole Village Award - New teacher orientation
  - Program Services
    - Outstanding Service Innovation - Meeting room hearing assist loops



# Partnerships

## Partnering Is A Strategic Tool:

- It flows out of the library's mission and vision
- It is a library-wide strategy
- It is centrally coordinated
- It is a formal process



# Partnerships

## Williamsburg Community Health Foundation

- Since 2000
- Goal: Strengthen area nonprofits by increasing their access to information
- Gained by the community:
  - Scholarships for Grantsmanship Center training hosted by WRL
  - Funding Research Center
  - Programs for nonprofit directors
  - Electronic network - Nonprofit e-mail listserv



# Partnerships



# Partnerships

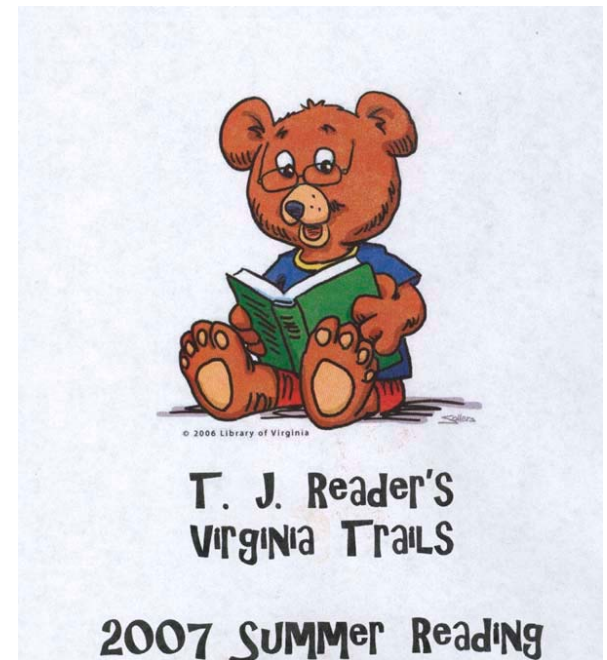
## AARP Tax-Aide

- Partnership between WRL, AARP and IRS for more than 24 years
- More than 8,600 tax returns prepared by 400 volunteers in past five years at both libraries



# Programs

- **Summer Reading Program**
  - 3,644 children completed in 2007
    - 33% of eligible children (Va. average is 13%)
  - Birth through grade 5: thematic program with incentives
  - Older children: Wheel of Reading where reading earns gift cards at the end of summer
  - Teens: Treats for Teens, short reviews with weekly drawing for a gift card.









# Program Evaluation

## Johns Hopkins Study of Summer Reading

- Who participated?
  - 64 students from Matthew Whaley and James River Elementary Schools
- What did the testing show?
  - Students who participated tested higher on standardized tests in the fall and exhibited better reading behaviors

# Program Evaluation

## Johns Hopkins Study of Summer Reading (cont'd)

- Difference between the 2nd graders and 5th graders?
  - Students entering grade two demonstrated greater increase in reading ability over those who did not participate.
  - Difference among 5th graders was smaller
- Is economic status an issue?
  - Children not eligible for free and reduced price meals read more books than children who were eligible

# Programs



## **Dewey Decibel Concert Series**

- Average of 20 concerts per year
- Mix of folk and jazz artists
- 3,800 attended in 2006 - 2007 season





# Outreach



- Outreach: “extending services beyond the walls of library buildings”

- Serving youth where they spend the day:
- Preschools and Childcare Centers
- Schools K-12
- Summer Recreation Camps
- Before and After School Programs

# Outreach (continued)

Serving adults who are the least able to visit library buildings

- Homebound
- Assisted Living Centers and Nursing Homes
- Adult Day Care Centers



# Our Community

- Community Population Change
  - 2000
    - 60,100
  - 2007
    - 74,197
- 23.4% increase



# Internet

- Internet Terminals 2000 - 2007
  - 2000 - 32 terminals
  - 2007 - 128 terminals



# Meeting Rooms

## Meeting Room Bookings 2000 - 2007

- Williamsburg Library
  - 11,710 events
  - 297,000 attendance
- James City County Library
  - 5,850 events
  - 66,393 attendance





# Library Collection



- Collection 2000
  - 295,220 items
- Collection 2007
  - 341,733 items

# Library Staff

- 96 FTE
- Volunteers
  - 175 Individuals
  - 80 for summer reading
  - 5,703 hours of service FY07



# WRL Statistics – FY 07

- **Circulation**
  - 1,224,520 items
- **Visits**
  - 654,070
- **Cardholders**
  - 52,318



# WRL Statistics FY 07

- **Collection**
  - 341,733
- **Electronic Access**
  - 175,680
- **Meeting Room Use**
  - 21,305



# Use Conditions

- Audio-visual area at Williamsburg Library





# Use Conditions

- YS shelving at James City County Library



# Use Conditions

- Staff work space



# Study Recommendation

PSA/Dewberry study recommended:

- A third library facility to relieve congestion at Williamsburg Library
- Provide services to west part of James City County
- Provide opportunities to reach out to teen community

# Third Library

- Enable the Williamsburg Regional Library to maintain its high level of service
- Provide for flexibility and full use of technology
- Is in James City County's CIP Plan for 2011



# Conclusion

- WRL is an award-winning library recognized for exceptional public service throughout Virginia and the Nation
- WRL is valued and used by the Community
- Our success is the direct result of the support given us by James City County and the City of Williamsburg
- WRL looks forward to working with the James City County Board of Supervisors to continue this excellence in the years to come

## M E M O R A N D U M

DATE: October 23, 2007

TO: The Board of Supervisors

FROM: Steven W. Hicks, General Services Manager

SUBJECT: James City County Devolution Analysis – Secondary Roads Study (Route Nos. 600 and above)

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**Overview**

Last year, James City County participated in the Virginia Department of Transportation's (VDOT) Secondary Roads Study led by the VDOT Local Assistance Division (LAD). The purpose of the study was to provide counties with a framework that identified necessary information, analyze options available, and to provide assistance with making the decision, as to whether to assume responsibilities of the secondary system of state highways.

At the January 27, 2007, Board of Supervisors' (BOS) retreat, presented was the study that provided an action plan to assist with implementation, if such responsibilities are assumed by a county, based on the language of the "*devolution statute*" (Section 33.1-84.1 of the Code of Virginia). The devolution statute allows the Board of Supervisors to determine if the county wants to assume all or a portion of several functions on the secondary system. VDOT has determined that a county's responsibilities for the assumption of the secondary system, falls into four general categories listed below. These four categories were studied to provide general background information on the devolution scenarios and an analysis of the cost and institutional implications for James City County under different devolution scenarios. As a result, you will find as part of this memorandum a report on the *Analysis of Secondary Road Devolution Options for James City County*, completed March 2007.

- 1) **Maintenance only** – includes, but is not limited to, pothole repair, pavement overlays, snow removal, sidewalk replacement, ditching, mowing, litter control, traffic control, as well as, sign and signal maintenance.
- 2) **Construction only** – includes planning, road design, right-of-way acquisition (including eminent domain), and construction.
- 3) **Maintenance and construction only** – all of the above.
- 4) **All functions including operations** – assumes operational responsibility which includes reviewing traffic impact studies (land development), site plan reviews, speed studies, issuing land use permits, new subdivision street review, inspection and acceptance, new signage, signal studies, new lighting, and new pavement markings. This option is equivalent to withdrawal from the state system of state highways, similar to those in Henrico and Arlington Counties.

During the BOS retreat, the Board provided guidance in evaluating *Maintenance and Construction* scenarios only. By assuming responsibilities for maintenance and construction, James City County will have no responsibility for operations of the secondary systems (unless otherwise negotiated with VDOT) and ownership of the system (right of ways) will remain with VDOT and require VDOT coordination. The following is a general description of maintenance and construction activities, the responsibilities, considerations, and functions listed below.



## Maintenance only

The County will be accountable for all maintenance activities related to the secondary system, but will not have the responsibility for the operations of the secondary system. The ownership of the system will remain with VDOT and require coordination with VDOT for certain maintenance activities. The following is a summary of the primary activities that will need to be performed:

- Vegetation control (mowing, etc.)
- Surface repairs/repaving
- Shoulder maintenance
- Ditch and drainage cleaning
- Roadside cleaning
- Landscaping
- Receiving and responding to customer calls
- Removal of roadside hazards
- Sign repair and replacement
- Guardrail repair/replacement
- Pavement marking replacement
- Snow and ice control
- Bridge inspection and repair
- Emergency/Incident response

## Construction

Construction includes planning, road design, right-of-way (ROW) acquisition (including eminent domain), construction of projects that add new capacity, completely replacing existing facilities, and or improvement of an existing facility. This may also include selected county-wide, related functions that are historically funded through the secondary construction allocation, such as private entrance pipe installation.

The County will be accountable for construction activities related to the secondary system based on their devolution MOU with VDOT. The following is a summary of the primary activities the County would be required to perform:

- Development of a 6-year plan
- Public hearings
- Design
- Environmental studies and permits
- Construction engineering and inspection
- Project letting
- Environmental inspection
- ROW, utilities, and permits
- General project management

## Maintenance and Construction Analysis

Analysis of a James City County *maintenance and construction* scenario was conducted using default values in the Secondary System Assessment Model and the same assumptions and/or adjustments discussed in the prior sections for the *maintenance only* and *construction only* scenarios (a separate, higher-level of service analysis was not included as part of this analysis).

The estimated recurring and non-recurring cost implications of a County *maintenance and construction* program are summarized in **Figure 1**. As shown, the total annual costs would start at \$4.8 million in 2009 and grow to \$5.3 million in 2014. Start-up costs would be \$5.0 million should the work be performed in-house and the County is not successful during negotiations/MOU to identify any VDOT facilities (e.g., maintenance area headquarters) or equipment that will be transferred, sold, leased or otherwise be available to the County. Again, for informational purposes, the analysis identifies the historical average annual emergency costs for the County and provides the level of secondary system maintenance outsourcing used by the Hampton Roads District.

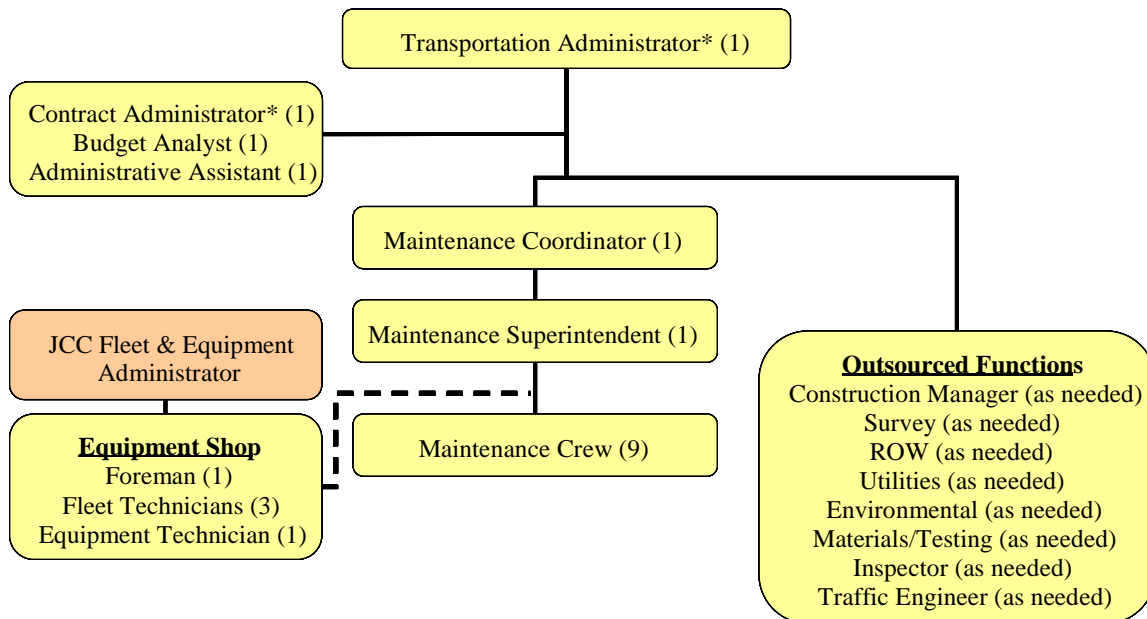
**Figure 1: Maintenance and Construction – Cost Estimate**

Annual Costs: Maintenance & Construction Scenario*						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
Overhead Costs	\$ 337	\$ 351	\$ 365	\$ 380	\$ 395	\$ 410
<b>Total Maintenance</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Construction</b>						
Numbered Project Costs	\$ 2,456	\$ 2,440	\$ 2,485	\$ 2,447	\$ 2,447	\$ 2,447
County-Wide Cost Centers	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90
<b>Total Construction</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Total Annual Costs</b>	<b>\$ 4,800</b>	<b>\$ 4,875</b>	<b>\$ 5,014</b>	<b>\$ 5,073</b>	<b>\$ 5,174</b>	<b>\$ 5,278</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326	Avg. Emergency Costs		\$ 867		
Vehicles and Equipment	\$ 1,637	Outsourcing Level		41%		
Office Start-up	\$ 50					
<b>Total Non-recurring Costs</b>	<b>\$ 5,013</b>					

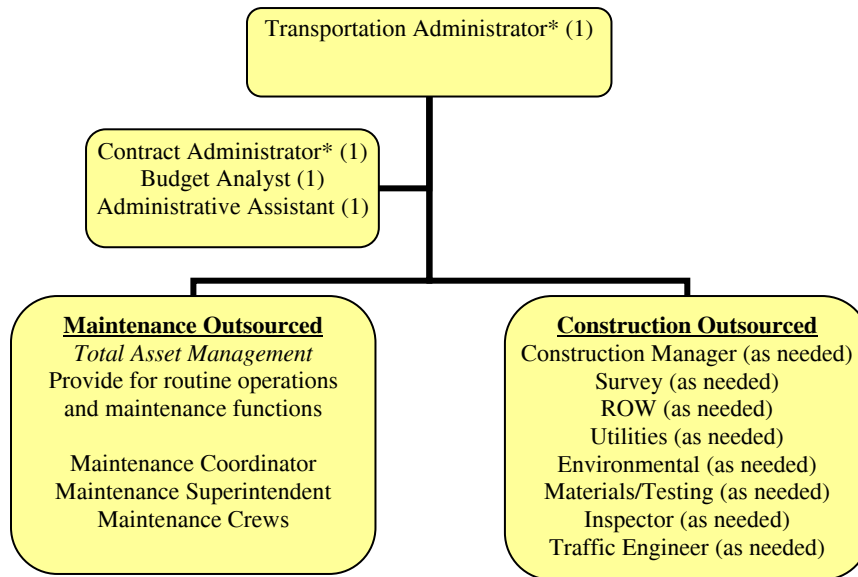
\*All figures in thousands of nominal dollars.

Staffing for a County *maintenance and construction* program would essentially be the same as with the *maintenance only* scenario (20 full-time positions or outsource services) since the program management personnel (Transportation Administrator, Contracts Administrator, Budget Analyst, and Administrative Assistant) could support both the maintenance and construction programs. The staffing organization for this scenario is illustrated in **Figure 2** should the maintenance functions be performed in-house and **Figure 3** illustrates the maintenance function should both programs be out outsourced.

**Figure 2: Maintenance and Construction – Proposed Organization Scenario**



**Figure 3: Maintenance and Construction – Proposed Organization Scenario**



\*Positions filled by existing or planned JCC staff.

**Key Points**

- ✓ The model and analysis report does not provide a definitive forecast of payment rates for maintenance and operations – estimate only: negotiate MOU with VDOT
- ✓ All new positions salaries and/or outsource will be budgeted based on VDOT’s allocations.
- ✓ VDOT incentives – Facilities and Equipment: negotiate MOU with VDOT
- ✓ Funded – Federal and State funds: no general fund required to maintain LOS

**Next Step**

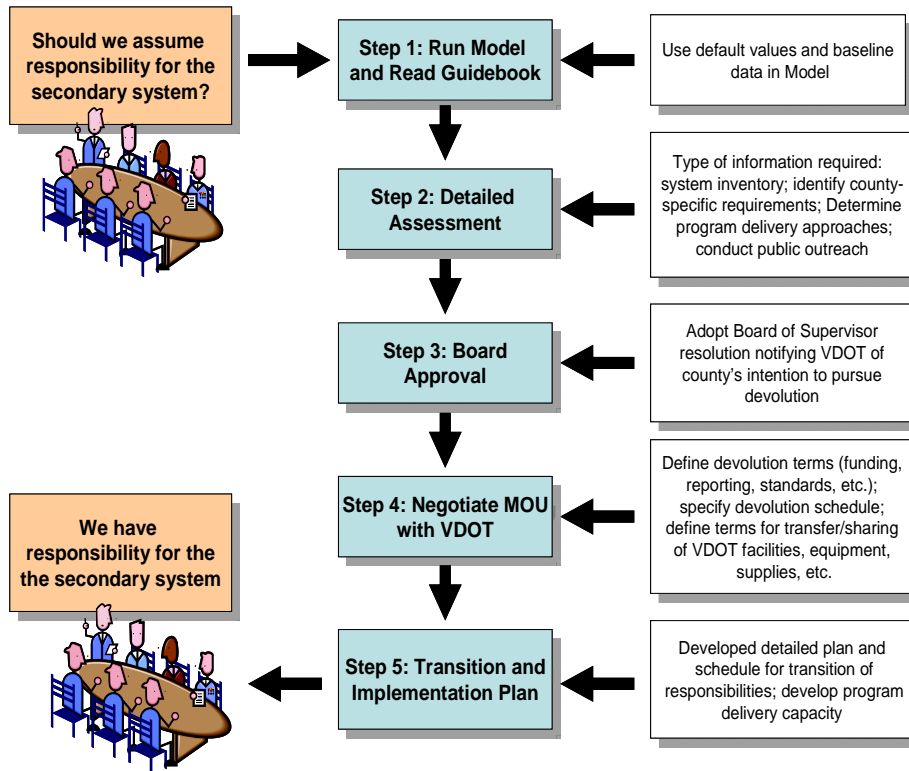
Steps 1 and 2 have been performed. The next steps are Step 3, 4 and 5.

**Step 3: Board Approval** – once a county has made the decision to pursue devolution of some or all secondary road responsibilities, its Board of Supervisors must adopt a resolution notifying VDOT of the county’s intent to enter into devolution negotiations. Similar to the process used with the Urban Construction Initiative, this resolution will need to be submitted no later than July 1, for potential assumption of responsibilities the following July 1, or for some time thereafter.

**Step 4: Negotiations** – a county will enter into discussions and negotiations with VDOT to develop a devolution agreement and MOU that will define the terms of a devolution arrangement. A county should prepare for this negotiation by determining what it “wants” and what it will “accept” in return for assuming a specific set of secondary road responsibilities. Counties should recognize, however, that VDOT will need to consider broad policy issues, legislation, and/or efforts to ensure statewide consistency during the development of the devolution agreement and MOU terms.

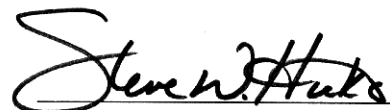
**Step 5: Transition and Implementation** – the final step in the devolution process will be the transition of functions to county responsibility and performance of those responsibilities by James City County. The transition process can be expected to take at least one year. The agreement and MOU should be fully executed at least 60 days prior to the proposed implementation date. To ensure it is adequately prepared for this phase of devolution, a county should consider developing a detailed plan that, at a minimum, delineates an approach and timeline to address the following considerations:

**Devolution Process**



**Recommendation**

Staff recommends that the Board of Supervisors adopt the attached resolution (**Step 3**) to resume responsibility for construction and maintenance functions, on the secondary system of highways, and authorizing the County Administrator authority to negotiate (**Step 4**) with VDOT, to develop a devolution agreement and MOU (**Step 5**), defining a timeframe for the county to assume specific secondary system responsibilities.

  
Steven W. Hicks

CONCUR:

  
Sanford B. Wanner

SWH/nb  
SecRdsStdy600up.mem

Attachments

# **James City County Devolution Analysis Report - Secondary Roads (Route numbers 600 and above)**

**Steven W. Hicks  
General Services Manager  
Board of Supervisor's  
Work Session  
October 23, 2007**



# Overview

**Devolution - a locality assuming responsibility for functions within its jurisdiction traditionally performed by the state government.**

**Legislation enacted in 2001 (33.1-84.1), referred to as the “*devolution statute*,” allows counties to assume less than the entire secondary system and different combinations of maintenance, construction, and operations.**





# Devolution Scenarios

- **Four (4) general program areas**
  - Maintenance only
  - Construction only
  - Maintenance and construction
  - All functions, including operations (withdrawal from State system)



# BOS Guidance

- Evaluate Maintenance and Construction Scenarios only.
  - JCC will not have any responsibilities for *Operations* such as:
    - Traffic Impact Studies
    - Speed Studies
    - Traffic Signal Studies
    - Traffic Engineering



# Maintenance Activities

- Vegetation control (mowing, etc.)
- Removal of roadside hazards
- Surface repairs/repaving
- Sign repair and replacement
- Shoulder maintenance
- Guard rail repair/ replacement
- Ditch and drainage cleaning
- Pavement marking replacement
- Road side cleaning
- Snow and ice control
- Landscaping
- Bridge inspection and repair
- Receiving and responding to customer calls
- Emergency/Incident response



# Maintenance: Estimated Costs

<b>Annual Costs: James City County Maintenance Only Scenario*</b>						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
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<b>Annual Costs: Maintenance Only w/ Higher Level of Service for Drainage</b>						
<b>Maintenance</b>						
Direct Costs	\$ 1,946	\$ 2,024	\$ 2,104	\$ 2,188	\$ 2,275	\$ 2,366
Overhead Costs	\$ 342	\$ 356	\$ 370	\$ 385	\$ 400	\$ 416
<b>Total Maintenance</b>	<b>\$ 2,288</b>	<b>\$ 2,380</b>	<b>\$ 2,475</b>	<b>\$ 2,573</b>	<b>\$ 2,676</b>	<b>\$ 2,782</b>
<b>Total Annual Costs</b>	<b>\$ 2,288</b>	<b>\$ 2,380</b>	<b>\$ 2,475</b>	<b>\$ 2,573</b>	<b>\$ 2,676</b>	<b>\$ 2,782</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326		Avg. Emergency Costs		\$ 867	
Vehicles and Equipment	\$ 1,637		Outsourcing Level		41%	
Office Start-up	\$ 37					
<b>Total Non-recurring Costs</b>	<b>\$ 5,000</b>					

\*All figures in thousands of nominal dollars.



# Construction Activities

- Planning/ 6 year plan development
- Project letting
- Public hearings
- Environmental inspection
- Design
- ROW, utilities, and permits
- Environmental studies and permits
- General project management
- Construction engineering and inspection





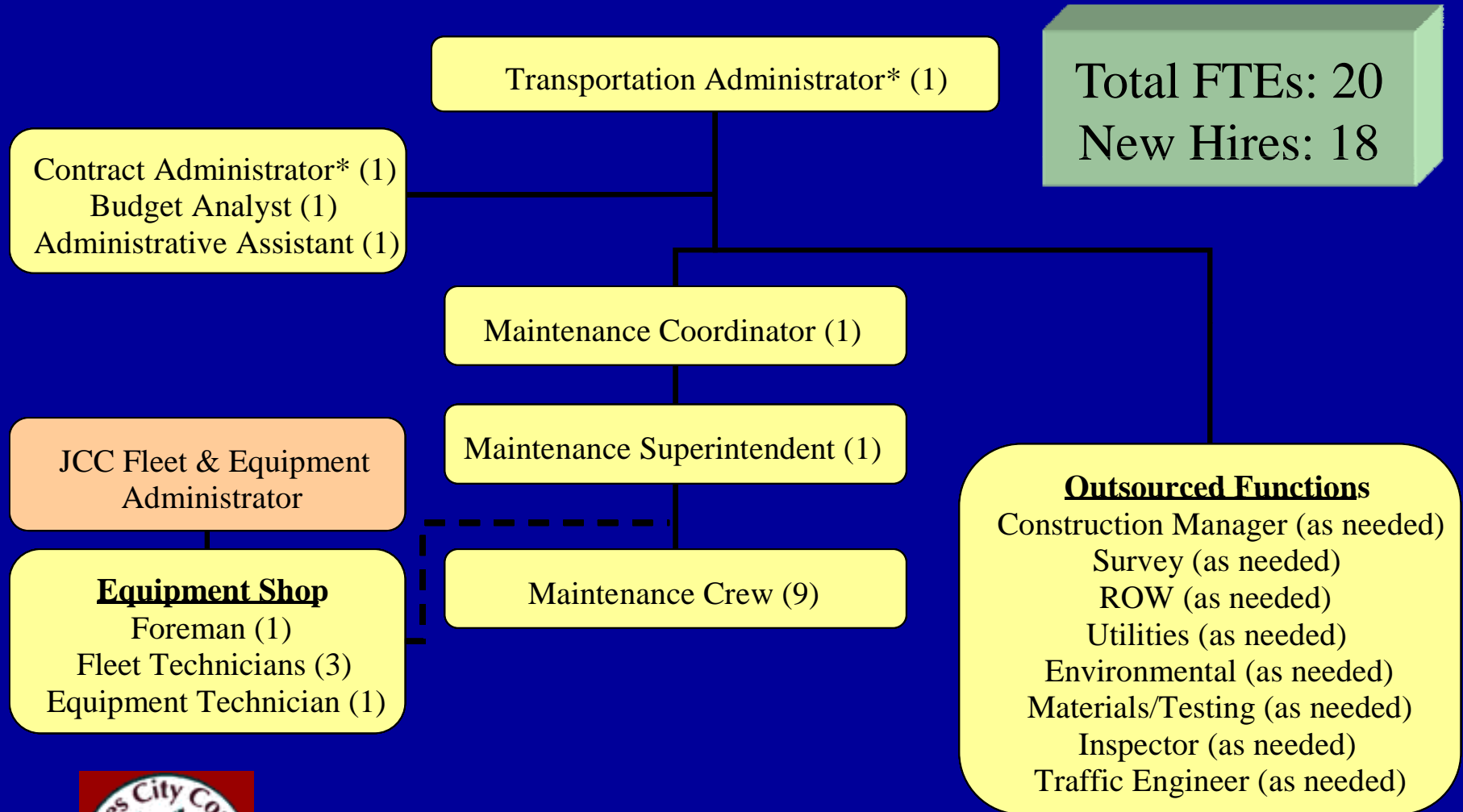
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<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ -			Avg. Emergency Costs	\$ 867	
Vehicles and Equipment	\$ 34			Outsourcing Level	41%	
Office Start-up	\$ 28					
<b>Total Non-recurring Costs</b>	<b>\$ 62</b>					

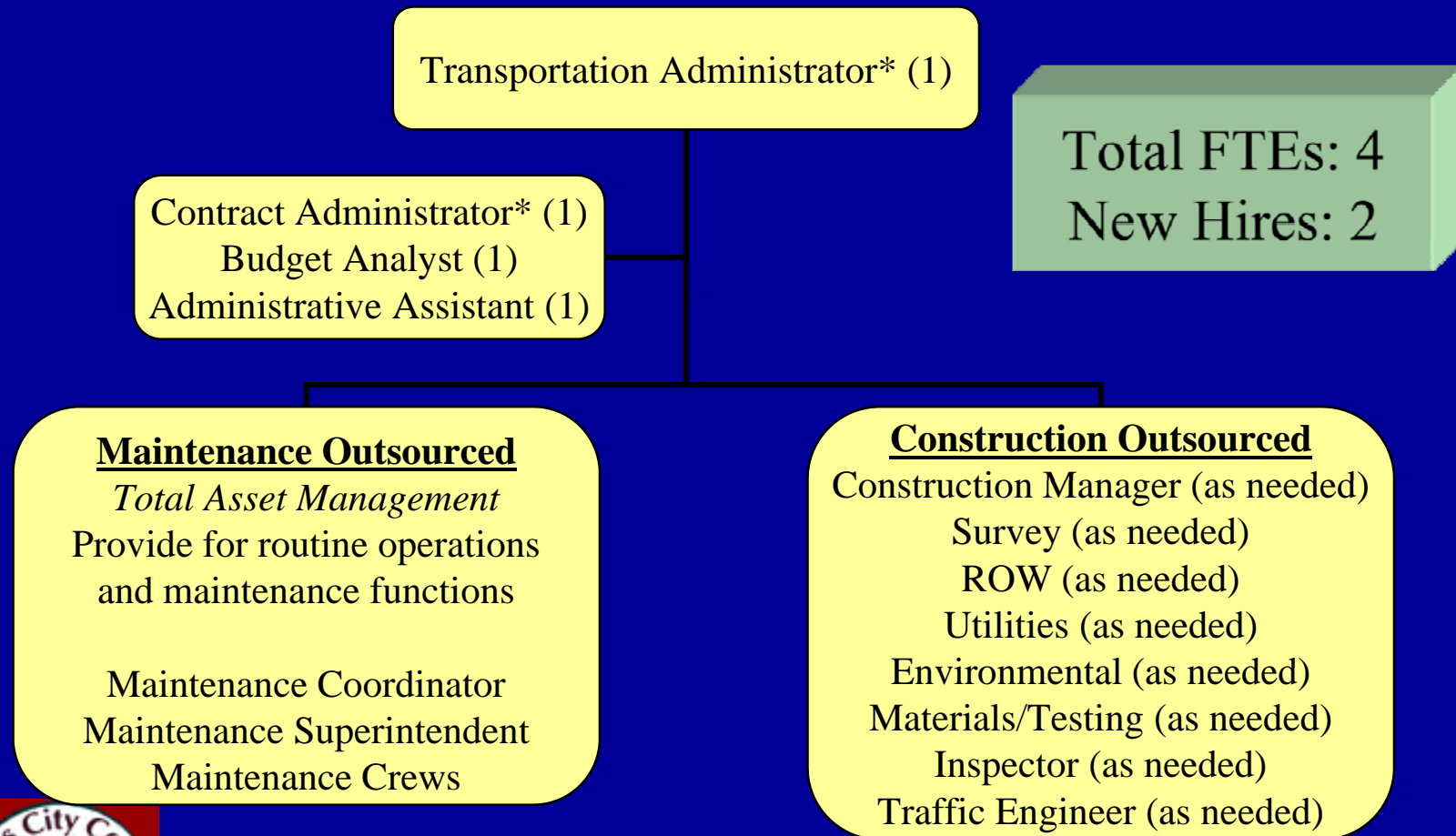
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# Maintenance and Construction Proposed Organizational Scenarios



# Maintenance and Construction Proposed Organizational Scenarios



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# Maintenance and Construction Summary: Estimated Costs

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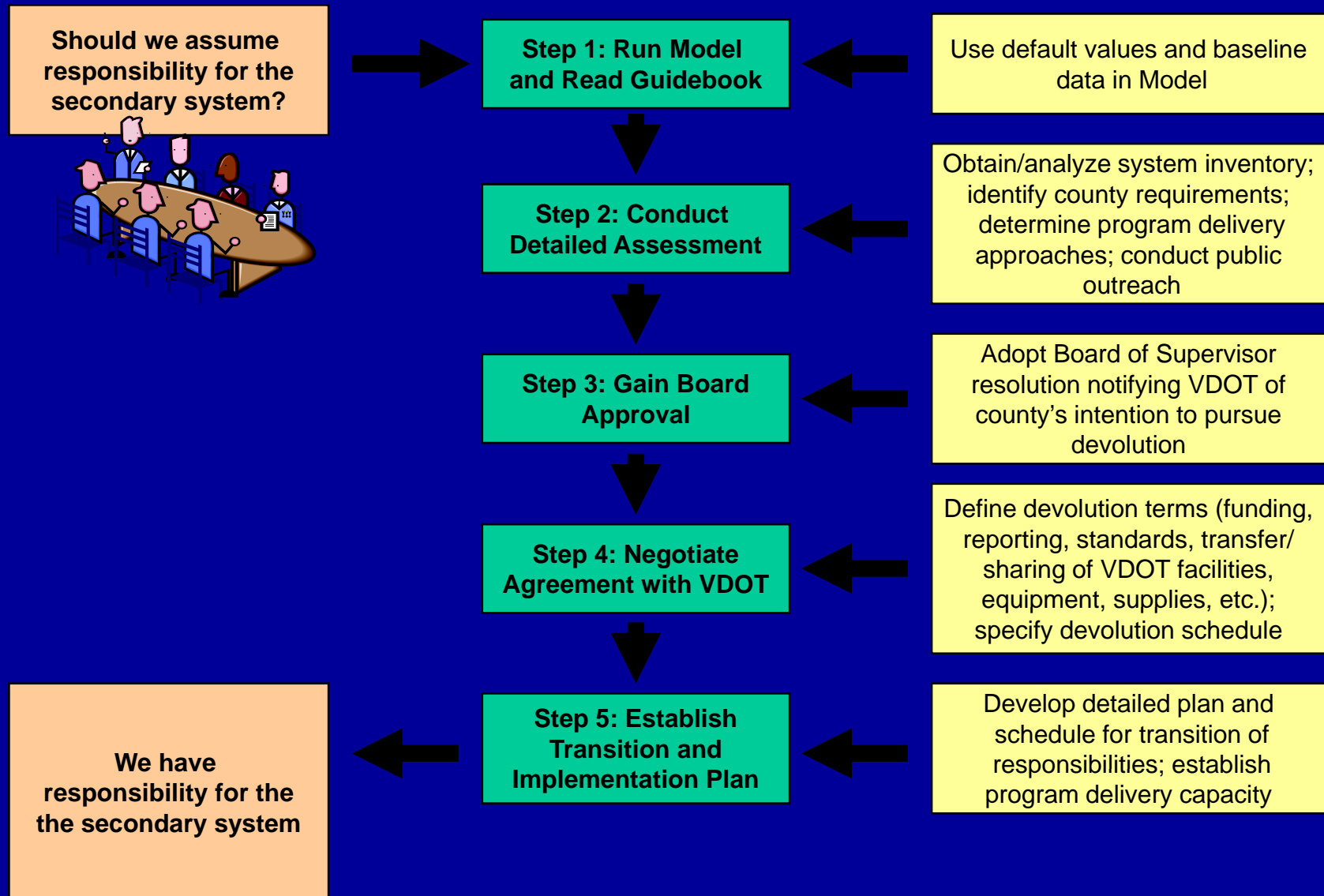
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- **All new positions salaries and/or outsource will be budgeted based on VDOT's allocations.**
- **VDOT incentives – Facilities and Equipment**
- **Funded with Federal/State Funds: no General Fund required to maintain LOS**





# Next Step – Devolution Process



## M E M O R A N D U M

DATE: October 23, 2007

TO: The Board of Supervisors

FROM: Steven W. Hicks, General Services Manager

SUBJECT: James City County Devolution Analysis – Secondary Roads Study (Route Nos. 600 and above)

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**Overview**

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The County will be accountable for construction activities related to the secondary system based on their devolution MOU with VDOT. The following is a summary of the primary activities the County would be required to perform:

- Development of a 6-year plan
- Public hearings
- Design
- Environmental studies and permits
- Construction engineering and inspection
- Project letting
- Environmental inspection
- ROW, utilities, and permits
- General project management

## Maintenance and Construction Analysis

Analysis of a James City County *maintenance and construction* scenario was conducted using default values in the Secondary System Assessment Model and the same assumptions and/or adjustments discussed in the prior sections for the *maintenance only* and *construction only* scenarios (a separate, higher-level of service analysis was not included as part of this analysis).

The estimated recurring and non-recurring cost implications of a County *maintenance and construction* program are summarized in **Figure 1**. As shown, the total annual costs would start at \$4.8 million in 2009 and grow to \$5.3 million in 2014. Start-up costs would be \$5.0 million should the work be performed in-house and the County is not successful during negotiations/MOU to identify any VDOT facilities (e.g., maintenance area headquarters) or equipment that will be transferred, sold, leased or otherwise be available to the County. Again, for informational purposes, the analysis identifies the historical average annual emergency costs for the County and provides the level of secondary system maintenance outsourcing used by the Hampton Roads District.

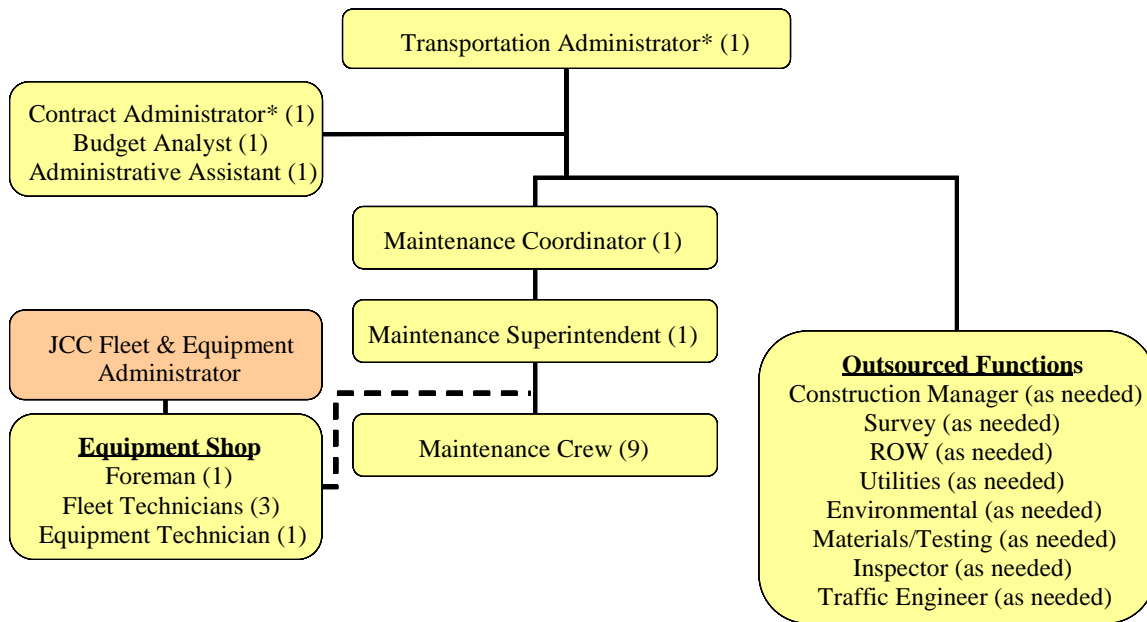
**Figure 1: Maintenance and Construction – Cost Estimate**

Annual Costs: Maintenance & Construction Scenario*						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
Overhead Costs	\$ 337	\$ 351	\$ 365	\$ 380	\$ 395	\$ 410
<b>Total Maintenance</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Construction</b>						
Numbered Project Costs	\$ 2,456	\$ 2,440	\$ 2,485	\$ 2,447	\$ 2,447	\$ 2,447
County-Wide Cost Centers	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90
<b>Total Construction</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Total Annual Costs</b>	<b>\$ 4,800</b>	<b>\$ 4,875</b>	<b>\$ 5,014</b>	<b>\$ 5,073</b>	<b>\$ 5,174</b>	<b>\$ 5,278</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326	Avg. Emergency Costs		\$ 867		
Vehicles and Equipment	\$ 1,637	Outsourcing Level		41%		
Office Start-up	\$ 50					
<b>Total Non-recurring Costs</b>	<b>\$ 5,013</b>					

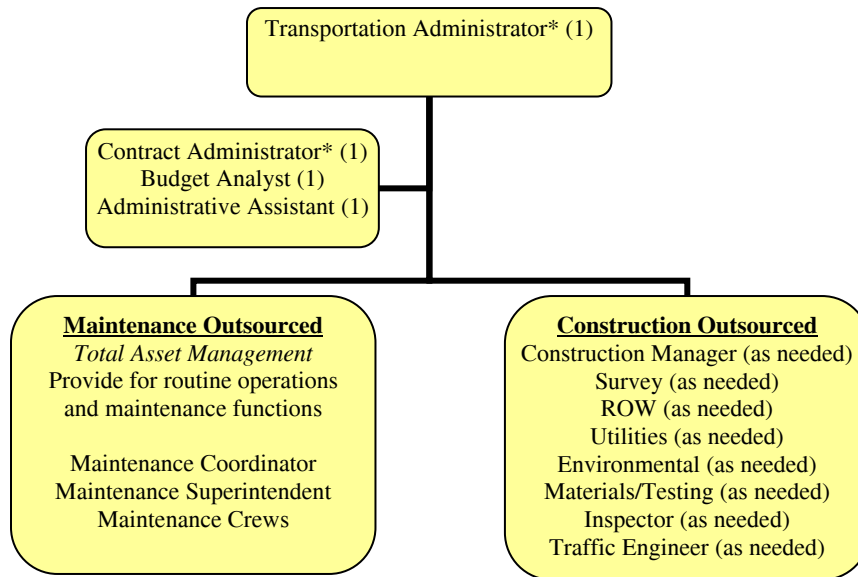
\*All figures in thousands of nominal dollars.

Staffing for a County *maintenance and construction* program would essentially be the same as with the *maintenance only* scenario (20 full-time positions or outsource services) since the program management personnel (Transportation Administrator, Contracts Administrator, Budget Analyst, and Administrative Assistant) could support both the maintenance and construction programs. The staffing organization for this scenario is illustrated in **Figure 2** should the maintenance functions be performed in-house and **Figure 3** illustrates the maintenance function should both programs be out outsourced.

**Figure 2: Maintenance and Construction – Proposed Organization Scenario**



**Figure 3: Maintenance and Construction – Proposed Organization Scenario**



\*Positions filled by existing or planned JCC staff.

**Key Points**

- ✓ The model and analysis report does not provide a definitive forecast of payment rates for maintenance and operations – estimate only: negotiate MOU with VDOT
- ✓ All new positions salaries and/or outsource will be budgeted based on VDOT’s allocations.
- ✓ VDOT incentives – Facilities and Equipment: negotiate MOU with VDOT
- ✓ Funded – Federal and State funds: no general fund required to maintain LOS

**Next Step**

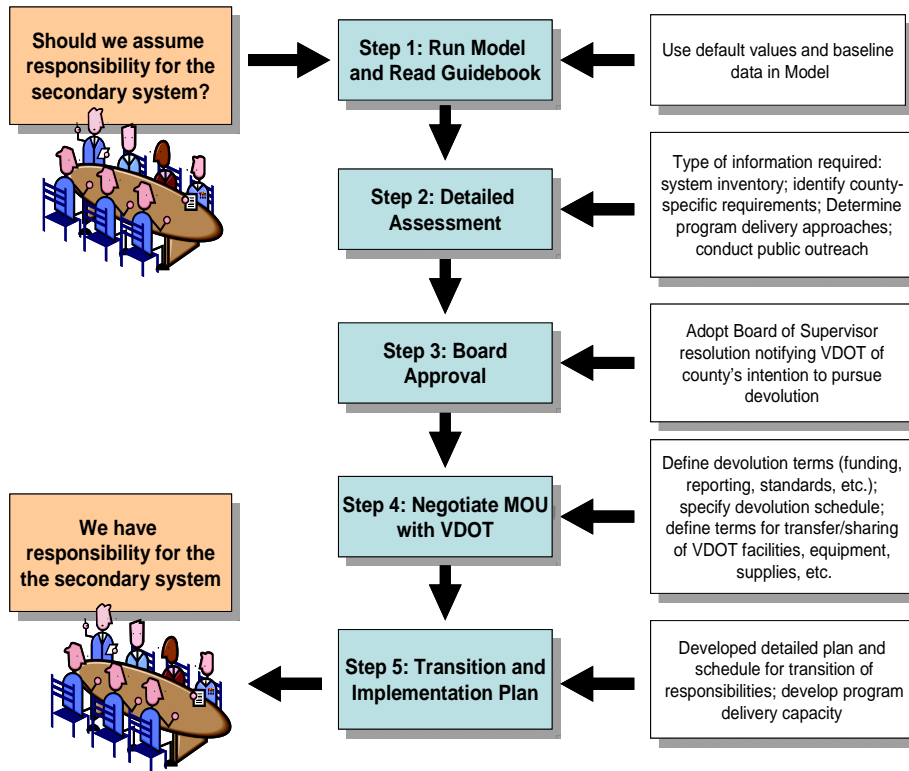
Steps 1 and 2 have been performed. The next steps are Step 3, 4 and 5.

**Step 3: Board Approval** – once a county has made the decision to pursue devolution of some or all secondary road responsibilities, its Board of Supervisors must adopt a resolution notifying VDOT of the county’s intent to enter into devolution negotiations. Similar to the process used with the Urban Construction Initiative, this resolution will need to be submitted no later than July 1, for potential assumption of responsibilities the following July 1, or for some time thereafter.

**Step 4: Negotiations** – a county will enter into discussions and negotiations with VDOT to develop a devolution agreement and MOU that will define the terms of a devolution arrangement. A county should prepare for this negotiation by determining what it “wants” and what it will “accept” in return for assuming a specific set of secondary road responsibilities. Counties should recognize, however, that VDOT will need to consider broad policy issues, legislation, and/or efforts to ensure statewide consistency during the development of the devolution agreement and MOU terms.

**Step 5: Transition and Implementation** – the final step in the devolution process will be the transition of functions to county responsibility and performance of those responsibilities by James City County. The transition process can be expected to take at least one year. The agreement and MOU should be fully executed at least 60 days prior to the proposed implementation date. To ensure it is adequately prepared for this phase of devolution, a county should consider developing a detailed plan that, at a minimum, delineates an approach and timeline to address the following considerations:

**Devolution Process**



**Recommendation**

Staff recommends that the Board of Supervisors adopt the attached resolution (**Step 3**) to resume responsibility for construction and maintenance functions, on the secondary system of highways, and authorizing the County Administrator authority to negotiate (**Step 4**) with VDOT, to develop a devolution agreement and MOU (**Step 5**), defining a timeframe for the county to assume specific secondary system responsibilities.

*Steven W. Hicks*  
 \_\_\_\_\_  
 Steven W. Hicks

CONCUR:

*Sanford B. Wanner*  
 \_\_\_\_\_  
 Sanford B. Wanner

SWH/nb  
 SecRdsStdy600up.mem

Attachments



# **James City County Devolution Analysis Report - Secondary Roads (Route numbers 600 and above)**

**Steven W. Hicks  
General Services Manager  
Board of Supervisor's  
Work Session  
October 23, 2007**



# Overview

**Devolution - a locality assuming responsibility for functions within its jurisdiction traditionally performed by the state government.**

**Legislation enacted in 2001 (33.1-84.1), referred to as the “*devolution statute*,” allows counties to assume less than the entire secondary system and different combinations of maintenance, construction, and operations.**



# Devolution Scenarios

- **Four (4) general program areas**
  - Maintenance only
  - Construction only
  - Maintenance and construction
  - All functions, including operations (withdrawal from State system)



# BOS Guidance

- Evaluate Maintenance and Construction Scenarios only.
  - JCC will not have any responsibilities for *Operations* such as:
    - Traffic Impact Studies
    - Speed Studies
    - Traffic Signal Studies
    - Traffic Engineering



# Maintenance Activities

- Vegetation control (mowing, etc.)
- Removal of roadside hazards
- Surface repairs/repaving
- Sign repair and replacement
- Shoulder maintenance
- Guard rail repair/ replacement
- Ditch and drainage cleaning
- Pavement marking replacement
- Road side cleaning
- Snow and ice control
- Landscaping
- Bridge inspection and repair
- Receiving and responding to customer calls
- Emergency/Incident response



# Maintenance: Estimated Costs

<b>Annual Costs: James City County Maintenance Only Scenario*</b>						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
Overhead Costs	\$ 337	\$ 351	\$ 365	\$ 380	\$ 395	\$ 410
<b>Total Maintenance</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Total Annual Costs</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Annual Costs: Maintenance Only w/ Higher Level of Service for Drainage</b>						
<b>Maintenance</b>						
Direct Costs	\$ 1,946	\$ 2,024	\$ 2,104	\$ 2,188	\$ 2,275	\$ 2,366
Overhead Costs	\$ 342	\$ 356	\$ 370	\$ 385	\$ 400	\$ 416
<b>Total Maintenance</b>	<b>\$ 2,288</b>	<b>\$ 2,380</b>	<b>\$ 2,475</b>	<b>\$ 2,573</b>	<b>\$ 2,676</b>	<b>\$ 2,782</b>
<b>Total Annual Costs</b>	<b>\$ 2,288</b>	<b>\$ 2,380</b>	<b>\$ 2,475</b>	<b>\$ 2,573</b>	<b>\$ 2,676</b>	<b>\$ 2,782</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326		Avg. Emergency Costs	\$ 867		
Vehicles and Equipment	\$ 1,637		Outsourcing Level	41%		
Office Start-up	\$ 37					
<b>Total Non-recurring Costs</b>	<b>\$ 5,000</b>					

\*All figures in thousands of nominal dollars.



# Construction Activities

- Planning/ 6 year plan development
- Project letting
- Public hearings
- Environmental inspection
- Design
- ROW, utilities, and permits
- Environmental studies and permits
- General project management
- Construction engineering and inspection





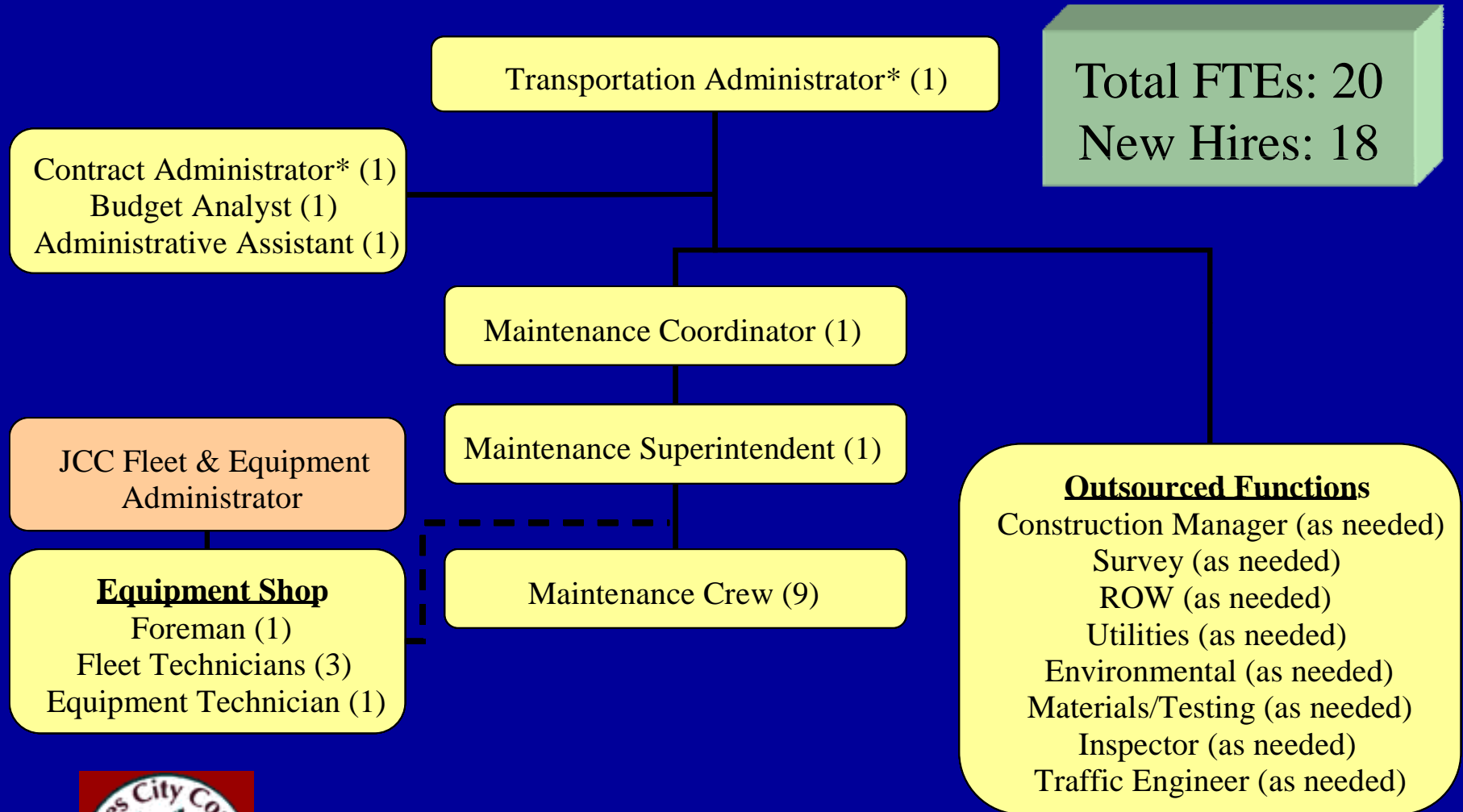
# Construction: Estimated Costs

<b>Annual Costs: James City County Construction Only Scenario*</b>						
	2009	2010	2011	2012	2013	2014
<b>Construction</b>						
Numbered Project Costs	\$ 2,456	\$ 2,440	\$ 2,485	\$ 2,447	\$ 2,447	\$ 2,447
County-Wide Cost Centers	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90
<b>Total Construction</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Total Annual Costs</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ -			Avg. Emergency Costs	\$ 867	
Vehicles and Equipment	\$ 34			Outsourcing Level	41%	
Office Start-up	\$ 28					
<b>Total Non-recurring Costs</b>	<b>\$ 62</b>					

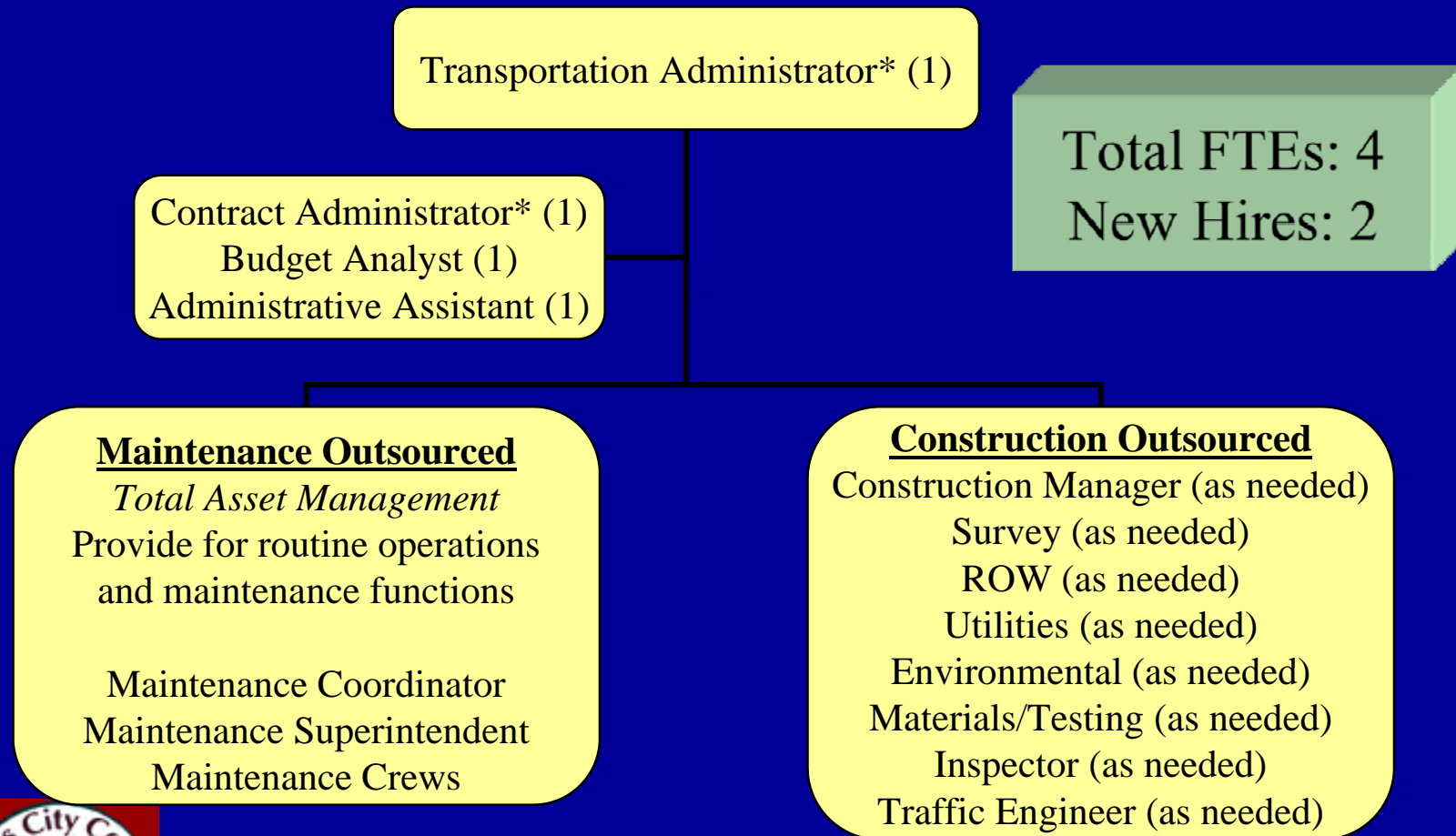
\*All figures in thousands of nominal dollars.



# Maintenance and Construction Proposed Organizational Scenarios



# Maintenance and Construction Proposed Organizational Scenarios



\*Positions filled by existing or planned  
JCC staff

# Maintenance and Construction Summary: Estimated Costs

Annual Costs: Maintenance & Construction Scenario*						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
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<b>Total Annual Costs</b>	<b>\$ 4,800</b>	<b>\$ 4,875</b>	<b>\$ 5,014</b>	<b>\$ 5,073</b>	<b>\$ 5,174</b>	<b>\$ 5,278</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326	Avg. Emergency Costs		\$ 867		
Vehicles and Equipment	\$ 1,637	Outsourcing Level		41%		
Office Start-up	\$ 50					
<b>Total Non-recurring Costs</b>	<b>\$ 5,013</b>					

\*All figures in thousands of nominal dollars.

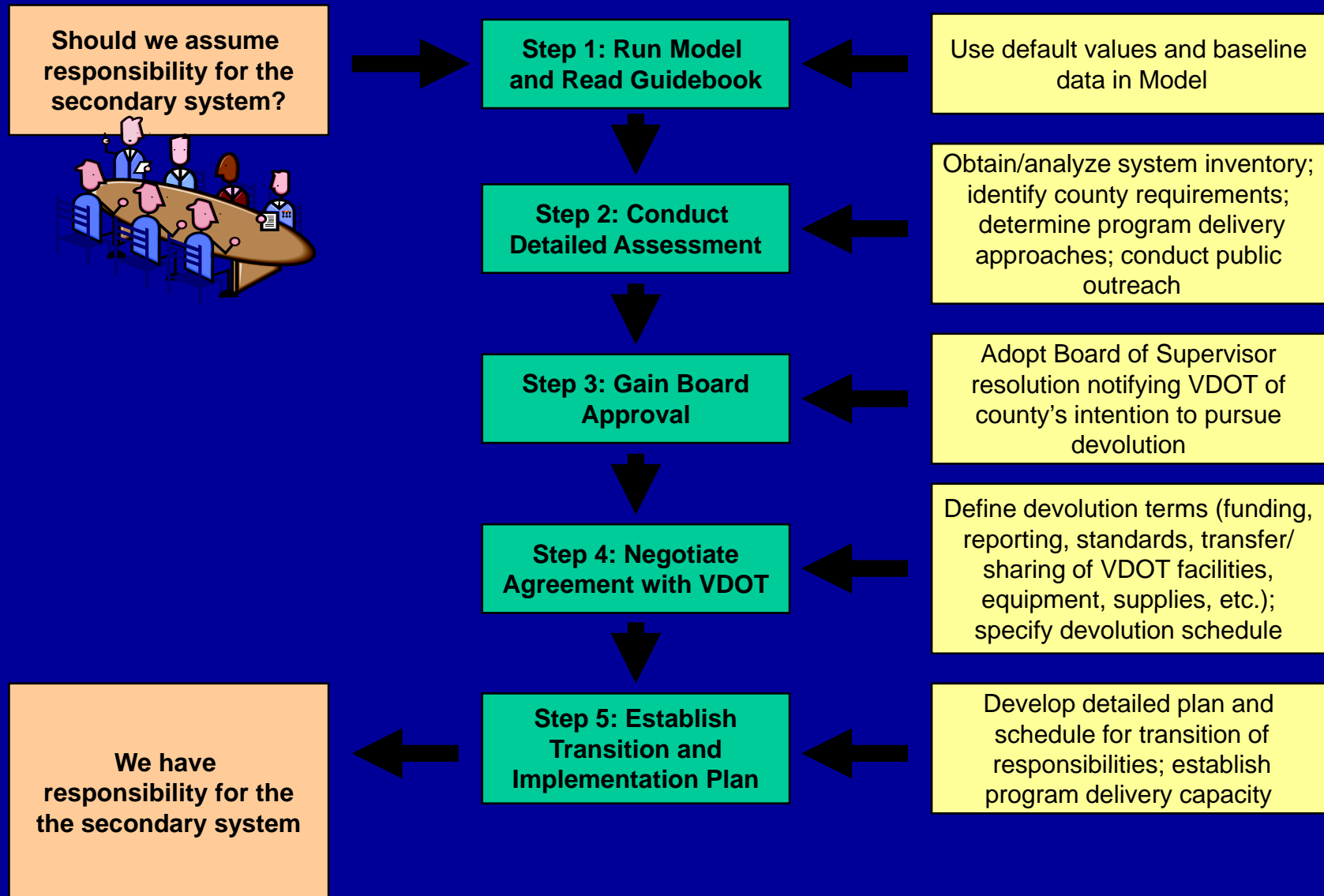


# Key Points

- **Model does not provide a definitive forecast of payment rates for maintenance and operations – estimate only: negotiate MOU with VDOT**
- **All new positions salaries and/or outsource will be budgeted based on VDOT's allocations.**
- **VDOT incentives – Facilities and Equipment**
- **Funded with Federal/State Funds: no General Fund required to maintain LOS**



# Next Step – Devolution Process



# Energy Conservation Initiatives



**Board of  
Supervisors**

***Work Session***

**Jennifer Privette  
Environmental  
Coordinator**

**October 23, 2007**



# Energy Conservation Initiatives

## Developing a sustainable energy plan

- James City County is leading by example in the areas of environmental and energy stewardship guided by our Strategic Management Plan to “Steward the natural environment and historic heritage”.
- **Program goals are in the areas of:**
  - Energy Conservation
  - Recycling
  - Green Building Design
  - Fleet Management



# Energy Conservation Initiatives

## JCC Energy & Environmental Policies

- September 25, 2007 Resolution: Cool Counties Declaration (votes 5-0)
  - Strategic Goals to stop greenhouse gas emissions growth by 2010 and work toward 80% reduction by 2050.
- FY07: Board of Supervisors endorsed staffing of a full-time position to promote and develop measurable goals for energy conservation and Green Building Design.
- January 13, 2004 Resolution: Reduction of Transportation Petroleum Use (votes 5-0)
  - “...reduce the County’s annual usage of petroleum for transportation purposes by January 1, 2010, by twenty percent with respect to the amount used in calendar year 2003 by James City County, James City Service Authority, Williamsburg Area Transport Company, and Williamsburg-James City Schools...”

# Energy Conservation Initiatives

## Benchmarks

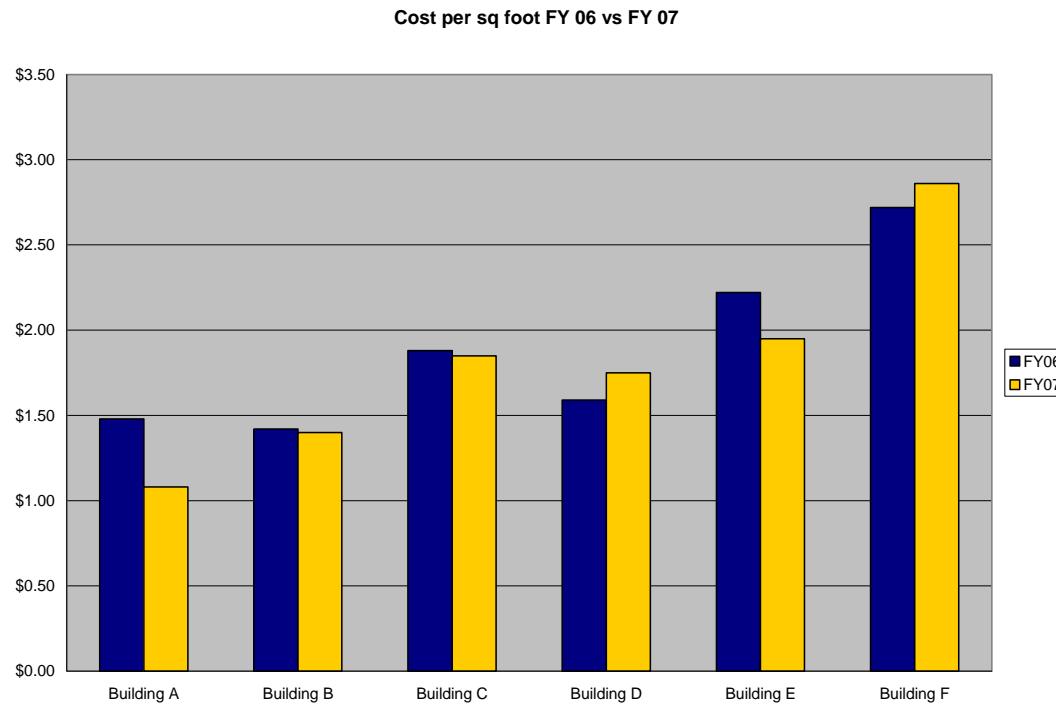
### James City County Gov't Complex

- Government Complex Building Energy Usage
- Utilities Expense Projection
- Lighting Usage

# Energy Conservation Initiatives

## Quick Summary of initiatives and activities

### Government Complex Building Energy Usage



In FY07 the electrical cost per square foot was reduced by 7%. Factors could be a milder winter, building renovations using energy efficient technology, and replacement of HVAC compressors that are more energy efficient.

# Energy Conservation Initiatives

## Quick Summary of initiatives and activities

### Lighting Usage/Utilities Expense Projection

- “Low-hanging fruit” in lighting through energy efficient bulbs, motion sensor conversions, and awareness.
- Energy accounting provides a tool for forecasting energy usage and trends.



# Energy Conservation Initiatives

## Quick Summary of initiatives and activities

### Alternative Fuel Fleet

- FY07: 6% reduction of petroleum usage
- 26 Flex Fuel E85 compatible vehicles
- 20 Hybrid vehicles – 4 more on order this year



# Energy Conservation Initiatives

## Greenhouse Gas Reduction Baseline

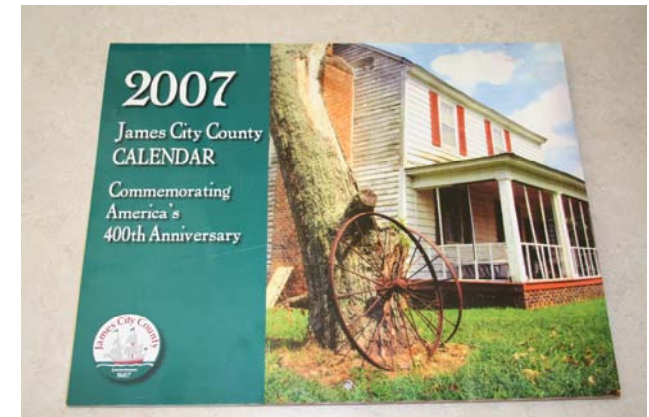
### Waste Prevention & Recycling Assessment – JCC Gov't

WasteWi\$, an EPA initiative that assists local governments to develop waste reduction programs. WARM calculates greenhouse gas reductions associated with waste prevention & recycling activities.

#### Recyclable

#### Pounds

- Office Paper 200,630
- Computers 1,805
- Tires 13,750
- Motor Oil 12,843





# Energy Conservation Initiatives

## Greenhouse Gas Reduction Baseline 2006

### Equivalencies

Conversion	Waste Prevention & Recycling	Description
Passenger vehicles per year	90.71	Removing this many passenger cars from road for one year (based on CO2E annually emitted per car)
Gallons of gasoline	57,109.38	This many gallons of gasoline (based on CO2 emissions per gallon)
Barrels of oil	1,163.58	This many barrels of crude oil (based on CO2 emissions per barrel)
Tanker truck of gasoline	6.72	This number of tanker trucks filled with gasoline.
Single-family household electricity use (# of households)	49.79	Household electricity use for one year (# of households)
Tons of waste recycled instead of landfilled	171.94	Tons of waste recycled instead of landfilled (based on CO2E emissions per ton of waste landfilled)
Equivalent Greenhouse Gas Reduction	498.04	Metric tons of greenhouse gases (carbon dioxide equivalent) reduced

# Energy Conservation Initiatives

## Summary

### County activities leading by example:

- Green Building Initiatives
- Energized Recycling Programs
- HRAEE Community Education Award
- Solar panel installation on facility
- Reduced energy cost in County buildings
- Alternative Fuel Fleet

# Energy Conservation Initiatives

## Good for the Environment, Good for the Economy

### Where do we go from here?

- Reduce energy consumption through no-cost changes up to investing in high-efficiency HVAC equipment
- Develop partnership with Energy Star, and programs related to energy sustainability and greenhouse gas reduction.
- Comprehensive Plan related to sustainability
- Green Team outreach
- Green Building Design to minimize impact on environment and promote energy efficiency

# **Analysis of Secondary Road\* Devolution Options for James City County**



Local Assistance Division  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, Virginia 23219  
(804) 786-2746

Commonwealth of Virginia

**March 2007**

**\*Secondary Roads refer to roads with route numbers 600 and above.**

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## 1 Overview

The Byrd Road Act, enacted by the Virginia General Assembly in 1932, established the secondary system of State highways but granted counties the option to maintain their own road systems and receive annual State funding to pay for their maintenance and operations. Four counties elected to opt out of the State system at that time – Henrico, Arlington, Warwick, and Nottoway. Of these, Warwick County became Warwick City and merged with the city of Newport News, and Nottoway County petitioned for re-admittance to the secondary system of State highways. Today, only Arlington and Henrico Counties maintain their own highway systems.

In 2001, the Virginia General Assembly enacted the “Devolution Statute” (§33.1-84.1 of the *Code of Virginia*), which provides that the Board of Supervisors of any county that wishes to assume responsibility for any portion of the State secondary system of highways within such county’s boundaries for the purposes of planning, constructing, maintaining, and operating such highways, may request that the Commonwealth Transportation Commissioner enter into and implement an agreement to do so. No county has implemented this provision since it was enacted.

### 1.1 Purpose of Secondary Roads Study

To support counties in assessing the implications of assuming responsibility for the secondary roads within their boundaries, the Virginia Department of Transportation (VDOT) contracted with TransTech Management, Inc. to conduct a study entitled: *Feasibility Analysis for Assumption of the Secondary Road System of State Highways by Counties of the Commonwealth of Virginia* (the Secondary Roads Assumption Study). The products of the Study include three primary elements:

1. **Devolution Guidebook** – a resource guidebook that defines different secondary system assumption options, identifies a wide range of issues counties may wish to evaluate in considering and planning for assumption of secondary system responsibilities, and provides a devolution “road map;”
2. **Feasibility Model for Secondary System Assumption by Virginia Counties (Secondary System Analysis Model)** – a tool for estimating the costs and institutional needs (staffing, equipment, and facility needs) of assuming different sets of secondary system responsibilities for individual counties; and
3. **Prototype Analyses** – detailed analyses of secondary system assumption options and implications for the two counties that participated in the Study (James City and Stafford Counties), to include county-specific reports – this document is the report for James City County.

## 1.2 Report Description

This report is designed to provide the James City County Board of Supervisors (BOS) and executive staff with general background information on secondary system devolution options and the devolution process (detailed information on devolution options and their implications is provided in the Devolution Guidebook). It also includes an initial analysis of the cost and institutional implications for James City County under different devolution options. The report was developed based on direct input from the James City County General Services Manager (Steven Hicks) and analyses using the Secondary System Analysis Model. The report organization and contents are as follows:

- **Section 1: Report Overview;**
- **Section 2: Devolution Options** – describes the different secondary system assumption options and associated implications and considerations;
- **Section 3: System Data** – provides information on the inventory of James City County’s secondary system assets;
- **Section 4: Analysis Overview** – identifies James City County’s objectives for devolution and discusses the analytical methodologies that were used to estimate the cost and institutional requirements associated with different devolution options;
- **Section 5: Devolution Scenarios** – provides estimates of the one-time costs, recurring costs, and institutional needs James City County could expect under four different devolution scenarios;
- **Section 6: Next Steps** – provides a devolution “road map” for James City County to follow in pursuing the assumption of some or all secondary system responsibilities; and
- **Appendices** – provides background information, including an inventory of James City County's secondary roads eligible for federal aid and outputs from the Secondary System Assessment Model for the four devolution scenarios.



## 2 Devolution Options

Based on the Devolution Statute, James City County may assume all or a portion of the responsibilities associated with its entire secondary system as follows:

- Maintenance only;
- Construction only;
- Maintenance and construction; and
- Maintenance, construction, and operations (full devolution and operational responsibility similar to the arrangements currently in place for Henrico and Arlington Counties).

The four devolution options offer varying degrees of responsibility and control, but also come with corresponding levels of program delivery effort, administrative implications, and liability. The following are general descriptions of these options and their implications/requirements. The actual scope and terms of James City County's secondary road responsibilities will be determined through a negotiated memorandum of understanding (MOU) between VDOT and the James City County BOS and an executed "devolution agreement" in accordance with the Devolution Statute.

### 2.1 *Maintenance Only*

James City County may elect to assume responsibilities for just the maintenance of the secondary system within its jurisdiction. By statute (Section 33.1-23.02 of the *Code of Virginia*), maintenance is defined as including ordinary maintenance (activities to preserve roadway structures and facilities), maintenance replacement (activities to restore roadway structures and facilities to their originally constructed condition), and any other categories of maintenance which may be designated by the VDOT Commissioner.<sup>1</sup>

Under the *maintenance only* option, James City County would be accountable for all maintenance activities related to the secondary system in the County, but would not have responsibilities for the construction program or operations of the secondary system. Actual ownership of the system would remain with VDOT. The following is a summary of the primary activities James City County would need to perform as part of a secondary system maintenance program:

---

<sup>1</sup> For purposes of devolution, "maintenance" includes activities related to several asset types in the "Traffic Devices" category that VDOT currently labels "operations" in its asset management and budgeting activities. It does not include activities related to traffic signals, traffic management systems, roadway tunnels or ferries.

- Vegetation control (mowing, brush cutting, etc.);
- Removal of roadside hazards;
- Surface repairs and resurfacing;
- Sign repair and replacement;
- Traffic control device maintenance and replacement (except traffic signals);<sup>2</sup>
- Shoulder maintenance;
- Guard rail repair/replacement;
- Ditch and drainage cleaning;
- Pavement marking repair/replacement;
- Roadside cleaning (removal of dead animals and litter);
- Snow and ice control;
- Landscaping;
- Bridge inspection and , repair and rehabilitation;
- Receiving and responding to customer calls; and
- Emergency/incident response.

Key policy considerations and administrative functions associated with the *maintenance only* devolution option include the following:

- **Planning, Programming, and/or Scheduling** – James City County would have full control to determine maintenance priorities, allocate maintenance funding to different maintenance activities, and schedule recurring and non-recurring maintenance work.
- **Permitting** – since VDOT would maintain ownership of the system under this scenario, all permitting responsibilities associated with the system would remain with VDOT.
- **Standards** – James City County would need to maintain secondary roads in accordance with VDOT standards or VDOT approved local standards for road maintenance and federal standards for bridge maintenance.
- **Project/Program Delivery** – requirements for how James City County's maintenance activities would need to be administered would be tied to the source

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<sup>2</sup> While the decision authority and approval of traffic control devices is part of operations, the upkeep, repair and replacement of these assets (except traffic signals) is considered part of maintenance for the purposes of devolution.

of funds.<sup>3</sup> Thus, for State- or federally-funded activities, the County would still need to comply with all applicable Virginia and/or federal laws and regulations relating to eligible expenses, procurement, environmental review, civil rights, etc.

- **Reporting** – audit and reporting requirements would be tied to the source of funds. Similar to other localities receiving quarterly payments, James City County would need to include information on the use of all funds in their annual audits. This information would subsequently be reported to VDOT on an annual basis. For federal funds, the County would need to comply with the reporting requirements of the Office of Management and Budget (OMB) Circular A-133. Additional reporting may be required to meet VDOT’s oversight requirements.
- **Public Outreach** – James City County would be responsible for receiving and responding to public comments and complaints related to secondary system maintenance activities.
- **Funding** – James City County would receive annual maintenance allocations from VDOT based on the work assumed. Those allocations would be based on the same approach identified in §33.1-23.5:1 of the *Code of Virginia* for counties which elect to assume responsibility for their secondary roads after 1986 and would be defined in the terms of the County’s devolution agreement and MOU with VDOT<sup>4</sup>. Payments from VDOT would be provided on a quarterly basis.
- **Liability** – James City County would assume responsibility for maintenance-related liabilities (e.g., tort claims tied to work zone incidents) for work performed by or on behalf of the County, and share other secondary system liabilities based on the terms of the devolution agreement and MOU.

## **2.2 Construction Only**

James City County may elect to assume responsibilities for only construction activities on its secondary system. For purposes of devolution, “construction” is defined as the planning, design, and construction of projects that add new capacity, completely replace existing facilities, or significantly improve the functionality of existing facilities. It also may include selected countywide, operations-related functions that are funded through secondary construction allocations, such as private entrance pipe installation.

Under the *construction only* option, James City County would be responsible for construction activities related to the secondary system based on the devolution agreement and MOU, but would have no responsibilities for maintenance or operations of the secondary system and ownership of the system would remain with VDOT. The

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<sup>3</sup> Note – due to recent VDOT funding constraints, a higher ratio of federal to State funds is currently being committed to maintenance than has been in the past.

<sup>4</sup> This differs from the process currently used to establish annual secondary system funding allocations for Henrico and Arlington Counties; funding levels for these counties are established through a per lane miles amount that is established (and occasionally revised) by the Virginia General Assembly and codified in the *Code of Virginia*.

following is a summary of the primary activities James City County would need to or could perform as part of a *construction only* devolution initiative:

**Mandatory Activities:**

- Planning/six-year plan development;
- Project letting;
- Public hearings;
- Environmental inspection;
- Design;
- Right-of-way acquisition, utilities, and permits;
- Environmental studies and permits;
- General project management; and
- Construction, engineering, and inspection (CEI).

**Optional Activities-(Countywide items currently funded from construction funds)**

- Private entrance pipe installation;
- Rural additions;
- Traffic calming;
- Traffic services; and
- Incidental engineering and surveying.<sup>5</sup>

If James City County were to assume construction responsibilities, it would need to work closely with the residency if it wants VDOT to perform some of the optional county-wide items. This discussion should include VDOT's availability/capacity to perform the work and the funding to address those activities. If James City County were to take over maintenance and construction activities, the optional activities also should be assumed by the County.

Key policy considerations and administrative functions associated with the *construction only* devolution option include the following:

- **Planning, Programming, and/or Scheduling** – responsibility for developing and programming County projects in the Secondary Six-Year Plan (SSYP) would continue to be shared between James City County and VDOT. The County would have full responsibility for the prioritization and scheduling of all construction

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<sup>5</sup> This does not include survey work associated with specific construction projects, which a county would be required to assume as part of the construction function.

projects and would continue to coordinate with the Hampton Roads Metropolitan Planning Organization to incorporate projects into the regional transportation improvement plan (TIP).

Since a significant portion of secondary construction allocations is currently comprised of federal funds, James City County would need to closely monitor the obligation of federal funds and coordinate through VDOT to receive federal authorization and changes in the obligation schedule (i.e., the State Transportation Improvement Plan (STIP)).

- **Permitting** – since VDOT would maintain ownership of the system under this scenario, all permitting responsibilities associated with the system would remain with the VDOT.
- **Standards** – design standards for construction projects would be tied to the source of funds, category of a roadway and maintenance responsibility. Federally-funded projects on National Highway System (NHS) routes would need to conform to VDOT design standards which exceed AASHTO standards. Federally-funded projects on non-NHS routes and State or locally-funded projects (on non-federal routes) would need to conform to VDOT standards, American Association of State Highway and Transportation Officials (AASHTO) standards, or other standards that are developed by a county and approved by VDOT.
- **Project/Program Delivery** – requirements for how construction activities are delivered would be tied to the source of funds. Thus, for State or federally-funded projects, James City County would need to comply with all applicable Virginia and/or federal laws and regulations relating to eligible expenses, public involvement, procurement, environmental review, civil rights, etc. The County would have full discretion to deliver locally-funded construction activities in accordance with the laws and regulations that govern County activities.
- **Reporting** – financial reporting requirements would be tied to the source of funds. For State construction funds, James City County would need to submit an annual audited statement accounting for the use of State funding. For federal funds, the County would need to comply with reporting requirements under OMB Circular A-133. Additional reporting may be required to meet VDOT's oversight requirements.
- **Public Outreach** – James City County would be responsible for complying with all applicable State and federal public outreach and review requirements (e.g., public comment periods) associated with the development and implementation of construction projects.
- **Funding** – the overall secondary construction allocation for James City County (based on FY07 SSYP, approximately \$843,000 per year) would be unchanged by devolution. The actual quarterly payments the County would receive from

VDOT would include the State portion of the secondary allocation (less amounts for countywide construction functions that are not assumed or for projects that will be completed by VDOT). Since federal funds are only provided as a reimbursement of qualifying expenditures, the federal portion of the County's construction allocation would be provided on a project-specific, reimbursement basis.

James City County would need to follow existing processes for working with the Hampton Roads MPO to identify opportunities and apply for federal funds that are allocated through MPOs (e.g., Congestion Mitigation and Air Quality (CMAQ) or Regional Surface Transportation Program (RSTP) funds).

- **Liability** – James City County would assume liability as a result of actual construction work performed by or for the County and VDOT would retain general liability for the system. VDOT will assume liabilities for a highway once construction is complete and the project is accepted by the Department.

### **2.3 Maintenance and Construction**

James City County may elect to assume responsibilities for maintenance *and* construction activities on the secondary system within its jurisdiction. Under this option, all of the responsibilities, policy considerations, and administrative functions listed above in the *maintenance only* and *construction only* sections would apply. James City County would have no operational responsibility for operations of the secondary system and operational ownership of the system would remain with VDOT.

### **2.4 Maintenance, Construction, and Operations (All Functions)**

James City County may elect to assume responsibilities for maintenance, operations, and construction activities on the secondary system within its jurisdiction. By choosing this option, it is assumed the County wants to assume full responsibility of all secondary system assets.<sup>6</sup> Under this scenario, James City County would assume all of the responsibilities for maintenance and construction listed above, as well as take over all operational functions (e.g., traffic engineering, land development, and permitting) and gain control of the facilities (e.g., conducting plan reviews, performing inspections, and issuing access permits). VDOT's oversight role would be much less than with the other options.

Key policy considerations and administrative functions associated with the *maintenance, construction, and operations* or "*all functions*" devolution option include the following:

- **Planning, Programming, and/or Scheduling** – James City County would have full responsibility for prioritizing, programming, and scheduling the use of all maintenance, operations, and construction funds. The County would still need to

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<sup>6</sup> For purposes of devolution, system assets include roadways, right-of-way, and appurtenances. It does not include VDOT facilities (e.g., area headquarters and material yards), equipment, or supplies.

coordinate with the Hampton Roads MPO and follow federally-mandated planning processes for the use of federal funds, as well as coordinate with VDOT for the authorization of federal funds.

- **Permitting** – James City County would assume all permitting responsibilities, including issuance and enforcement of utility permits, entrance permits, and “subdivision street connection” permits.
- **Standards** – design and construction standards would remain tied to the source of funds and the type of facility. Federally-funded projects on NHS routes would need to conform to VDOT design standards, which exceed AASHTO standards. Federally-funded projects on non-NHS routes and State or locally- funded projects (on non-federal routes) would need to conform to VDOT standards, AASHTO standards, or other standards that are developed by a county and approved by VDOT.
- **Project/Program Delivery** – the same conditions as with the maintenance and construction options would apply, with requirements tied to the source of funds. Thus, for State- or federally-funded projects and activities, James City County would need to comply with all applicable Virginia and/or federal laws and regulations relating to eligible expenses, public involvement, procurement, environmental review, civil rights, etc.
- **Reporting** – even with full operational responsibility, financial reporting requirements would remain tied to the source of funds. James City County would submit an annual audited statement accounting for the use of all funding – this information would subsequently be reported to VDOT in accordance with the *Code of Virginia* on an annual basis. For federal funds, the County would need to comply with reporting requirements outlined in OMB Circular A-133. Additional reporting may be required to meet VDOT’s oversight requirements.
- **Public Outreach** – James City County would be responsible for all public outreach activities associated with the secondary system. This would include receiving and responding to citizen and stakeholder issues and complaints associated with the maintenance and operations of the system, as well as complying with all applicable State and federal public outreach and review requirements associated with the development and implementation of construction projects and programs.
- **Funding** – James City County would receive annual allocations from VDOT for maintenance and operations based on the established methodology and terms of the devolution agreement and/or MOU, with funding provided on a quarterly basis. Funding for construction would be provided as described in the *construction only* section above.
- **Liability** – James City County would assume all liabilities associated with the secondary system within its jurisdiction.



### 3 James City County Secondary System

The secondary system of highways in James City County currently consists of 22 structures and 561 lane miles (277.5 centerline miles) of roadway, 57.84 lane miles of which (11 percent) are part of the federal system and eligible for federal funding. **Figure 3-1** provides detailed information on the breakdown of highway centerline miles by type of facility.

**Figure 3-1: James City County Secondary System – Highway Inventory (2005)**

Type of Facility	Number of Centerline Miles	Type of Facility	Number of Centerline Miles
Divided Highways	5.78	2 Lane (20 ft)	75.17
4 or More Lanes	0.10	2 Lane (18 ft)	17.48
3 Lanes	0.10	2 Lane (16 ft or less)	65.70
2 Lanes (24 ft or greater)	49.23	1 Lane	0.84
2 Lane (22ft)	63.10		

VDOT collects and analyzes annual condition and performance information on selected secondary system assets at the district level to determine the percentage of assets that are in “good” condition (i.e., the assets that are not in need of replacement or restoration). While secondary highway performance at the county level may differ from district-level results, the information can provide a county with an initial assessment of current performance levels for the highway assets the county may assume. **Figure 3-2** presents the 2005 conditions for selected assets for the VDOT Hampton Roads District (James City County’s District) and compares them to VDOT’s optimum performance targets.<sup>7</sup>

**Figure 3-2: Hampton Road District – 2005 Conditions for Selected Assets**

Asset Type	Optimum Performance Target (% Good)	Current Conditions (% Good)	Gap
Cross Pipe	88%	56%	32%
Guardrails	97%	36%	61%
Guardrail Terminals	99%	57%	42%
Paved Ditches	99%	71%	28%
Pavement Markings	65%	48%	17%
Flexible Pavement	91%	68%	23%
Signs	86%	58%	28%
Unpaved Ditches	92%	71%	21%
Unpaved Shoulders	88%	93%	N/A

<sup>7</sup> “Optimum Performance” represents the level of system preservation where no asset maintenance is deferred into subsequent years. In other words, one minus the optimum performance target equals the depreciation rate for a given asset.

## James City County Devolution Analysis Report

In accordance with federal bridge inspection requirements, VDOT maintains a statewide inventory and current condition data on all highway bridges and structures in the State.<sup>8</sup> Bridge condition data is then converted into condition ratings of 1 to 9; ratings of 7 and above mean a facility is in good condition, ratings of 5 and 6 means the condition is in fair condition and beginning to show signs of deterioration, and ratings below 4 mean the structure is in poor condition and in need of renovation, rehabilitation or replacement. An inventory of the secondary system bridges and structures in James City County, and their associated conditions ratings, is provided in **Figure 3-3**.

**Figure 3-3: James City County Bridge and Structure Inventory**

Route No.	Facility Carried	Feature Intersected	Year Built	Length (ft.)	Type of Structure	Condition Rating <sup>9</sup>
N/A	Two Rivers Road	Cart Underpass	1991	10	Culvert	8.0
600	Holly Fork Road	Ware Creek	1932	23	Bridge	5.7
601	Route 601	Diascund Creek	1932	61	Bridge	6.0
602	Fenton Mill Road	Skimino Creek	1973	17	Culvert	8.0
603	Route 603	Edwards Swamp	1949	19	Culvert	6.0
603	Route 603	Diascund Creek	1961	8	Culvert	6.0
607	Croaker Road	C&O Railway	1979	157	Bridge	6.3
608	Mount Laurel Road	France Swamp	1975	29	Culvert	6.0
608	Mount Laurel Road	France Swamp	1975	15	Culvert	7.0
608	Mount Laurel Road	France Swamp	1975	8	Culvert	7.0
612	Longhill Road	Long Hill Swamp	1972	15	Culvert	7.0
612	Longhill Road	Long Hill Swamp	1972	15	Culvert	8.0
612	Longhill Road	Chisel Run	1999	50	Culvert	7.0
613	Route 613	Powhatan Tributary	1974	31	Culvert	6.0
622	Stewart Road	Diascund Creek	1937	36	Bridge	7.0
622	Stewart Road	Diascund Creek	1937	71	Bridge	7.0
629	Hickory Signpost Road	Mill Creek	1932	40	Bridge	7.7
633	Jolly Pond Road	Jolly Pond Spillway	1982	35	Bridge	6.3
633	Jolly Pond Road	Jolly Pond	1985	13	Bridge	6.3
646	Newman Road	Skiminio Creek	1976	28	Culvert	8.0
1220	Mill Pond Run	Ped. Wallway	1997	10	Culvert	5.0
1221	Mill Pond Run	Mill Swamp	1997	256	Bridge	7.0

<sup>8</sup> Bridges and structures include all bridges and pipes and box/arch culverts having a gross opening of 36 square feet or greater.

<sup>9</sup> Conditions for bridge conditions represent the average of ratings for deck, superstructure, and substructure.

## 4 Analysis Overview

### 4.1 Devolution Objectives

James City County staff has identified two primary areas where assumption of some or all secondary System responsibilities could potentially benefit the County and its citizens:

- James City County is considering the creation of a storm water utility tax to address drainage issues along many roadways in the County. The success of this initiative, however, will hinge on the County's ability and authority to control and manage secondary system right-of-way and ditches. By assuming maintenance functions (either as a stand alone activity or in conjunction with other functions), James City County would have a greater ability to coordinate secondary system maintenance schedules and county drainage work.
- The County BOS desires a higher level of service than VDOT currently provides in some secondary system maintenance areas. In particular, the BOS would like improved response times and higher quality of service for activities such as sign replacements, maintenance of drainage assets, mowing, snow/ice removal, and general roadside clean-up. By assuming some or all secondary system responsibilities, including maintenance, the BOS and James City County staff would have more control to allocate resources and schedule work to meet citizen needs and expectations.

### 4.2 Analytical Scope and Methodology

To support James City County in exploring different options for achieving its stated objectives, the Secondary System Analysis Model was used to estimate the costs and institutional implications (staffing, equipment, and facility needs) under each of the four devolution options. While full documentation of the Secondary System Analysis Model is provided in the Model User's Manual, the following is brief description of the key model components:

- **Asset Types and Functions** – maintenance activities are broken down into six asset groups (drainage, roadside, traffic devices, pavements, structures, and special facilities) and snow removal.
- **County Stratification** – to support the development of average historical VDOT maintenance and operations cost data, counties were grouped into six strata based on similar geographic, demographic, and system usage characteristics. James City County is in the Urban/High Growth County Strata.
- **Maintenance and Operations Costs** – VDOT maintenance and operations cost data for FY 2000-2005 was converted into constant 2005 dollars to enable

calculation of average annual expenditures for the six-year period for the secondary system in each county. These averages are used to determine average VDOT costs per lane mile/structure for a county's "strata" for specific asset types and functions. The applicable costs per lane mile/structure for a strata are then multiplied by the number of lane miles/structures in a county's secondary system to determine average (constant) VDOT costs for a given county. These figures are then converted to nominal (year-of-expenditure) dollars for the applicable years using either a default or user-identified inflation rate.

The additional costs associated with secondary system responsibilities that are operational in nature proved more difficult to estimate since VDOT does not have a consistent method for capturing costs for this segment of activities. It is also assumed that a portion of these costs for activities such as subdivision review and permits issuance would be recovered by a county through development fees. To provide a baseline, cost estimates for these activities are based on some historical data, combined with input from subject matter experts and is tied to staffing needs that support this function.

- **Higher Level of Service Analysis** – two approaches are used to estimate maintenance costs associated with achieving higher levels of service. For selected assets (e.g., cross pipes, pavement surfaces, and pavement markings), the VDOT Asset Management Division's Planning Module was used to identify the required percentage increase in spending (above historical VDOT expenditure levels) to close the gap between current and optimum performance in five years. For other assets and recurring functions, such as roadside maintenance and snow/ice removal, a required percentage increase in spending was determined based on the expert opinion of senior VDOT field personnel. With the second approach, model users also have the option to manually adjust expenditures by a percentage of baseline estimates.
- **Construction Costs** – construction costs are based on a county's annual Secondary Six-Year Plan funding levels as reflected in the FY07 SSYP, plus any additional construction funding a county enters into the Model.
- **Overhead Costs** – VDOT's calculated rates for agency and program overhead are used to determine overhead costs under devolution. Overhead for general management and maintenance, and operations programs is calculated as a percentage of program direct costs. Construction overhead is included within the construction allocation.
- **Emergency Costs** – for informational purposes, the model provides historical (FY 2000-2005) average county reimbursements for extraordinary expenses related to hurricanes, major snowstorms, or other natural disasters that are funded by the Federal Emergency Management Agency (FEMA), Federal Highway Administration, and/or State emergency appropriations.

- **Equipment Needs** – requirements and estimating methodologies based on current VDOT equipment inventories and the expert opinion of senior VDOT field personnel are used to develop a recommended equipment complement.
- **Staffing Needs** – requirements and estimating methodologies based on VDOT man-hour data and the expert opinion of senior VDOT field personnel are used to identify staffing needs. Staffing estimates assume an outsourcing ratio equivalent to that being used by VDOT in the Hampton Roads District.
- **Facility Needs** – the model uses an adaptation of the approach from the recent VDOT Area Headquarters Study to identify the need for maintenance yards (i.e., area headquarters (AHQs)). Office space requirements are calculated based on estimated staffing levels and American Institute of Architects space requirement guidelines.

## 5 Devolution Scenarios

### 5.1 General Assumptions

To provide customized analyses, the consultant and VDOT's Local Assistance Division Staff worked with the James City County General Services Manager to determine values and/or approaches for various analytical assumptions. The following are key assumptions that are included in the analyses:

- **Devolution Start Year** – FY 2009 (assumes the James City County BOS adopts a resolution notifying VDOT of its devolution intent by July 1, 2007 and completes a devolution agreement and MOU with VDOT and executes a devolution agreement effective July 1, 2008);
- **Annual Inflation Rate** – three percent (Model default value);
- **Overhead Costs** – model default values (VDOT overhead rates) are used;
- **Future System Growth Assumptions** – 6.0 lane miles per year (based on average annual James City County system growth from 1997 to 2006).

### 5.2 Maintenance Only Scenario

Analysis of a James City County *maintenance only* scenario was conducted using default values in the Secondary System Assessment Model with the following adjustments:

- **Equipment Needs** – the range of equipment needs was reduced to reflect existing James City County equipment resources and the maintenance activities that the County would likely outsource;
- **Staffing** – the staffing needs analysis was adjusted to reflect existing or planned James City County transportation staff and the County's anticipated approach to maintenance program delivery (additional equipment repair staff was added at the request of the General Services Manager); and
- **Level of Service** – the analysis was run based on both the current VDOT level of service for all maintenance functions and with a ten percent increase in spending for drainage assets (over current VDOT spending) to achieve a higher level of service.

A summary of the recurring and non-recurring cost implications of a James City County *maintenance only* program are summarized in **Figure 5-1**. As shown, the scenario with higher level of service for drainage would create additional annual costs of \$33,000 to \$41,000 over the first five years of the program (2009-2013). Start up costs would total \$5.0 million, two thirds of which would be associated with the purchase and build-out of a maintenance yard (greater detail on estimated equipment and facility needs is provided in **figure 5-2**). For informational purposes, the analysis also identifies the average annual "extraordinary" emergency costs VDOT incurred for James City County

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secondary roads between FY 2000 and FY 2005. The figure also provides information on the level of secondary system maintenance outsourcing used by the Hampton Roads District, which is reflected in the program in the program costs estimates.

**Figure 5-1: Maintenance Only - Cost Estimates**

Annual Costs: James City County Maintenance Only Scenario*						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
Overhead Costs	\$ 337	\$ 351	\$ 365	\$ 380	\$ 395	\$ 410
<b>Total Maintenance</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Total Annual Costs</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Annual Costs: Maintenance Only w/ Higher Level of Service for Drainage</b>						
<b>Maintenance</b>						
Direct Costs	\$ 1,946	\$ 2,024	\$ 2,104	\$ 2,188	\$ 2,275	\$ 2,366
Overhead Costs	\$ 342	\$ 356	\$ 370	\$ 385	\$ 400	\$ 416
<b>Total Maintenance</b>	<b>\$ 2,288</b>	<b>\$ 2,380</b>	<b>\$ 2,475</b>	<b>\$ 2,573</b>	<b>\$ 2,676</b>	<b>\$ 2,782</b>
<b>Total Annual Costs</b>	<b>\$ 2,288</b>	<b>\$ 2,380</b>	<b>\$ 2,475</b>	<b>\$ 2,573</b>	<b>\$ 2,676</b>	<b>\$ 2,782</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326			Avg. Emergency Costs	\$ 867	
Vehicles and Equipment	\$ 1,637			Outsourcing Level	41%	
Office Start-up	\$ 37					
<b>Total Non-recurring Costs</b>	<b>\$ 5,000</b>					

\*All figures in thousands of nominal dollars.

**Figure 5-2: Maintenance Only - Equipment and Facility Needs**

Equipment Needs				Facility Needs	
	Number of Pieces	Cost Per Piece	Total Cost		
<b>Maintenance/Operations Equipment</b>				<b>Needs</b>	
Arrow Signs - Trailer Mounted	2	\$ 6,753	\$ 13,506	Number of	1
Backhoes & Attachments	1	\$ 122,033	\$ 122,033	Sq ft of	0
Dump Trucks- Large	1	\$ 117,447	\$ 117,447		
Dump Trucks- Standard	3	\$ 88,887	\$ 266,661	<b>Maintenance Yard Costs</b>	
Dump Trucks- 1 Ton	1	\$ 41,320	\$ 41,320	Land (9 acres)	\$ 911,662
Gradall	1	\$ 225,000	\$ 225,000	Yard Build-out	\$ 1,350,611
Motor Grader	1	\$ 144,440	\$ 144,440	Building Cost	\$ 804,739
Mowers - Tractor Attachments	4	\$ 71,132	\$ 284,529	Chemical Storage	\$ 258,867
Pickup Trucks	3	\$ 33,968	\$ 101,904	<b>Total</b>	<b>\$ 3,325,879</b>
Snowplows	12	\$ 3,613	\$ 43,355		
Spreaders	6	\$ 6,854	\$ 41,126		
Tractors w/ Misc. Attachments	1	\$ 43,220	\$ 43,220		
Trucks - Crash Cushion Vehicle	2	\$ 79,011	\$ 158,021		
Variable Message Signs	2	\$ 17,220	\$ 34,441		
<b>Subtotal</b>			<b>\$ 1,637,001</b>		
<b>Office Equipment</b>					
Computers	6	\$ 2,251	\$ 13,506		
Telephones/Telephone System	7	\$ 281	\$ 1,970		
Copier/Printer/etc.	1	\$ 5,628	\$ 5,628		
Desks/Chairs/etc.	6	\$ 1,688	\$ 10,130		
Misc. Office Set-up	1	\$ 5,628	\$ 5,628		
<b>Subtotal</b>			<b>\$ 36,860</b>		
<b>Total Equipment Costs</b>			<b>\$ 1,673,862</b>		

Based on the adjustments made to the staffing analysis, James City County would require 20 full-time positions to deliver a maintenance program, two of which could be filled with existing or planned County staff positions (equipment shop staff would likely

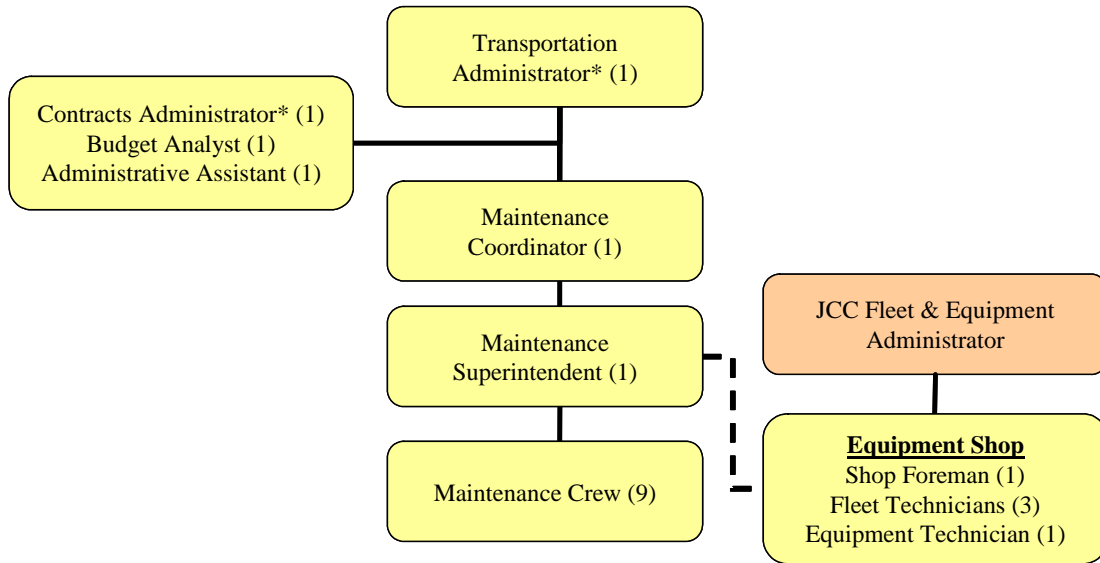


report to the James City County Fleet and Equipment Administrator). These positions, illustrated in **Figure 5-3**, would be as follows:

- **Transportation Administrator** – responsible for managing the overall transportation program. Duties would include policy development, budgeting, programming, needs assessment, public outreach, intergovernmental coordination, and program oversight.
- **Contracts Administrator** – manages and conducts oversight of maintenance/operations out-sourcing and design/construction contracts.
- **Budget Analyst** – develops budgets and conducts procurement/ purchasing.
- **Administrative Assistant** – provides clerical and administrative support.
- **Maintenance and Operations Coordinator** – oversees the maintenance or maintenance and operations functions. Duties would include hiring, needs assessment, budgeting, prioritizing and scheduling, intergovernmental coordination, and general program management.
- **Superintendent** – identifies needed work, schedules/dispatches crews, manages materials and equipment, and provides oversight of crews.
- **Crew Member** – performs a wide range of maintenance functions.
- **Shop Foreman** – manages the equipment shop, oversees the county's equipment/vehicle fleet, and identifies equipment/vehicle replacement needs.
- **Equipment Shop Staff** – repairs and maintains vehicles and equipment.

Expanded descriptions for these positions can be found in the Guide to County Assumption of Secondary Roads (Devolution Guidebook) which is a companion to this report.

Figure 5-3: Maintenance Only – Proposed Organization Chart



\*Positions filled by existing or planned JCC staff.

### 5.3 Construction Only Scenario

Analysis of a James City County *construction only* scenario was conducted using default values in the Secondary System Assessment Model with the following assumptions and/or adjustments:

- **Program Level** – approximately \$850,000 per year in annual VDOT construction allocations (based on the 2007 Secondary Six-Year Program), and an additional \$1.6 million annually from other sources such as Congestion Mitigation and Air Quality (CMAQ) and Regional Surface Transportation Program funds.
- **Countywide Cost Centers** – assume James City County takes over responsibility for all optional countywide cost centers;<sup>10</sup>
- **Staffing** – nominal new hire needs due to use of existing/planned James City County staff and a high level of outsourcing; and
- **Facilities** – no additional space requirement; assume the planned General Services Facility will accommodate all office space needs.

<sup>10</sup> Countywide cost centers are highway functions that are operational in nature but are currently funded out of VDOT’s construction program. Functions that are optional for a county to assume under the *construction only* and *maintenance and construction* scenarios include installing pipes and other items to accommodate private access to the secondary system (pipe & entrance), traffic calming, rural additions, engineering and survey, and traffic services; assumption of the fertilization and seeding function is mandatory. The site plan review function is only an option under the *all functions* scenario.

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A summary of the recurring and non-recurring cost implications for a James City County *construction only* program are summarized in **Figure 5-4**. As shown, the annual total program size (including program management costs), is expected to remain at roughly \$2.5 million per year for the 2009-2014 period. Start-up costs for a construction only program would be relatively small (\$62,000), with needs limited to a pick-up truck and office equipment.

**Figure 5-4: Construction Only – Cost Estimate**

<b>Annual Costs: James City County Construction Only Scenario*</b>						
	2009	2010	2011	2012	2013	2014
<b>Construction</b>						
Numbered Project Costs	\$ 2,456	\$ 2,440	\$ 2,485	\$ 2,447	\$ 2,447	\$ 2,447
County-Wide Cost Centers	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90
<b>Total Construction</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Total Annual Costs</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ -		Avg. Emergency Costs		\$ 867	
Vehicles and Equipment	\$ 34		Outsourcing Level		41%	
Office Start-up	\$ 28					
<b>Total Non-recurring Costs</b>	<b>\$ 62</b>					

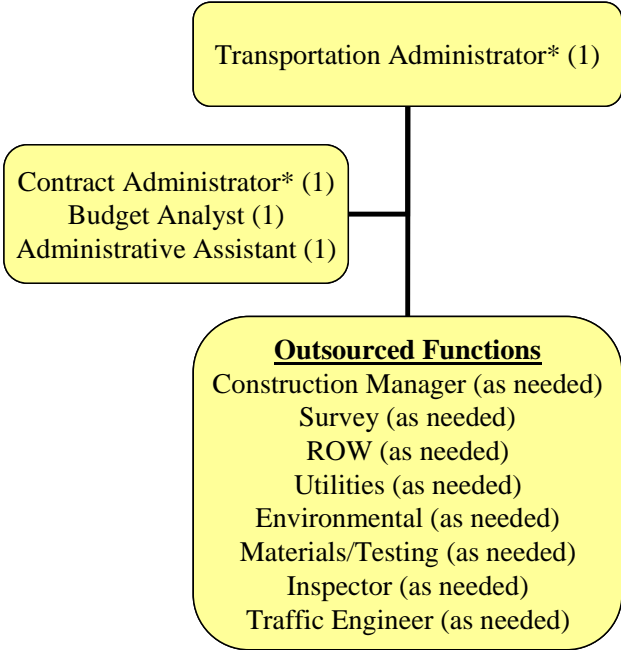
\*All figures in thousands of nominal dollars.

Based on the adjustments made to the staffing analysis, James City County would require a staff of four full-time positions to deliver a *construction only* program, two of which could be filled with existing or planned County staff positions. These positions, illustrated in **Figure 5-5**, would be as follows:

- **Transportation Administrator** – responsible for managing the overall transportation program. Duties would include policy development, budgeting, programming, needs assessment, public outreach, intergovernmental coordination, and program oversight.
- **Contracts Administrator** – manages and conducts oversight of maintenance/operations out-sourcing and design/construction contracts.
- **Budget Analyst** – Develops budgets and conducts procurement/purchasing.
- **Administrative Assistant** -- provides clerical and administrative support for the maintenance director and other program management staff.

Expanded descriptions for these positions can be found in the Guide to County Assumption of Secondary Roads (Devolution Guidebook) which is a companion to this report.

Figure 5-5: Maintenance Only – Proposed Organization Chart



\*Positions filled by existing or planned JCC staff.

### 5.4 Maintenance and Construction Scenario

Analysis of a James City County *maintenance and construction* scenario was conducted using default values in the Secondary System Assessment Model and the same assumptions and/or adjustments discussed in the prior sections for the *maintenance only* and *construction only* scenarios (a separate, higher-level of service analysis was not included as part of this analysis).

The estimated recurring and non-recurring cost implications of a James City County *maintenance and construction* program are summarized in **Figure 5-6**. As shown, the total annual costs would start at \$4.8 million in 2009 and grow to \$5.3 million in 2014. Start-up costs would be \$5.0 million, essentially the same as under the *maintenance only* scenario. Again, for informational purposes, the analysis identifies the historical average annual emergency costs for James City County and provides the level of secondary system maintenance outsourcing used by the Hampton Roads District.

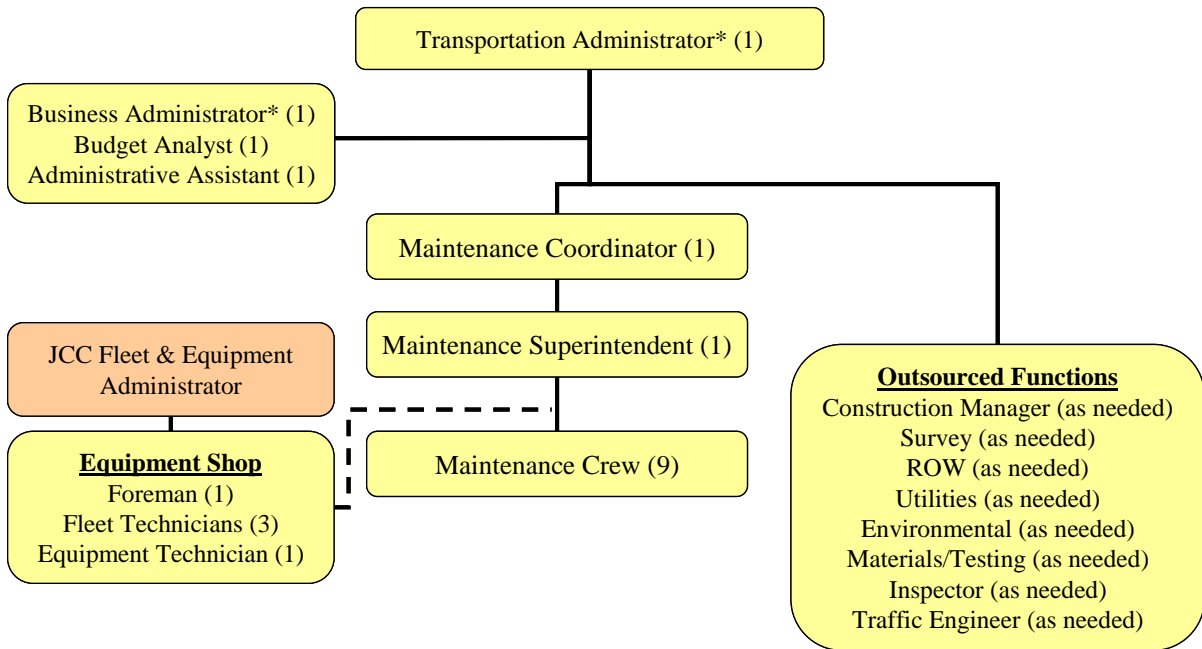
**Figure 5-6: Maintenance and Construction – Cost Estimate**

<b>Annual Costs: Maintenance &amp; Construction Scenario*</b>						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
Overhead Costs	\$ 337	\$ 351	\$ 365	\$ 380	\$ 395	\$ 410
<b>Total Maintenance</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>Construction</b>						
Numbered Project Costs	\$ 2,456	\$ 2,440	\$ 2,485	\$ 2,447	\$ 2,447	\$ 2,447
County-Wide Cost Centers	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90
<b>Total Construction</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Total Annual Costs</b>	<b>\$ 4,800</b>	<b>\$ 4,875</b>	<b>\$ 5,014</b>	<b>\$ 5,073</b>	<b>\$ 5,174</b>	<b>\$ 5,278</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326	Avg. Emergency Costs		\$ 867		
Vehicles and Equipment	\$ 1,637	Outsourcing Level		41%		
Office Start-up	\$ 50					
<b>Total Non-recurring Costs</b>	<b>\$ 5,013</b>					

\*All figures in thousands of nominal dollars.

Staffing for a James City County *maintenance and construction* program would essentially be the same as with the *maintenance only* scenario (20 full-time positions) since the program management personal (Transportation Administrator, Contracts Administrator, Budget Analyst, and Administrative Assistant) could support both the maintenance and construction programs. The staffing organization for this scenario is illustrated in **Figure 5-7**.

**Figure 5-7: Maintenance and Construction – Proposed Organization Chart**



\*Positions filled by existing or planned JCC staff.

### **5.5 Maintenance, Construction, and Operations Scenario**

Analysis of a James City County *maintenance, construction, and operations* or “*all functions*” devolution scenario was conducted using the Secondary System Assessment Model based on the same defaults, assumptions, and adjustments discussed in the prior sections for the *maintenance only*, *construction only*, and *maintenance and construction* scenarios, along with consideration of the County also taking over operational responsibility for the State Secondary System.

The estimated recurring and non-recurring cost implications of a James City County *all functions* program are summarized in **Figure 5-8**. The annual costs associated with assuming operations functions would primarily be due to additional staffing requirements for conducting site plan review and permitting, although it is anticipated that most of these costs would be recovered through the collection of fees. The operations function would not add significant additional equipment and facilities needs (details are provided in **Figure 5-9**). Again, the analysis identifies the average annual extraordinary emergency costs for James City County secondary roads and the level of secondary system maintenance outsourcing used by the Hampton Roads District.

**James City County Devolution Analysis Report**

**Figure 5-8: All Functions Cost Estimate**

<b>Annual Costs: James City County All Functions *</b>						
	2009	2010	2011	2012	2013	2014
<b>Maintenance</b>						
Direct Costs	\$ 1,917	\$ 1,994	\$ 2,074	\$ 2,156	\$ 2,242	\$ 2,331
Overhead Costs	\$ 337	\$ 351	\$ 365	\$ 380	\$ 395	\$ 410
<b>Total Maintenance</b>	<b>\$ 2,255</b>	<b>\$ 2,345</b>	<b>\$ 2,439</b>	<b>\$ 2,536</b>	<b>\$ 2,637</b>	<b>\$ 2,741</b>
<b>OPERATIONS</b>						
Direct Costs	\$ 414	\$ 427	\$ 440	\$ 453	\$ 467	\$ 481
County-Wide Cost Centers	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
Overhead Costs	\$ 75	\$ 78	\$ 80	\$ 82	\$ 85	\$ 87
<b>Total Operations</b>	<b>\$ 504</b>	<b>\$ 519</b>	<b>\$ 535</b>	<b>\$ 551</b>	<b>\$ 567</b>	<b>\$ 584</b>
<b>Construction</b>						
Numbered Project Costs	\$ 2,456	\$ 2,440	\$ 2,485	\$ 2,447	\$ 2,447	\$ 2,447
County-Wide Cost Centers	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90
<b>Total Construction</b>	<b>\$ 2,546</b>	<b>\$ 2,530</b>	<b>\$ 2,575</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>	<b>\$ 2,537</b>
<b>Total Annual Costs</b>	<b>\$ 5,304</b>	<b>\$ 5,394</b>	<b>\$ 5,548</b>	<b>\$ 5,623</b>	<b>\$ 5,741</b>	<b>\$ 5,862</b>
<b>Start-up Costs*</b>			<b>Other Information</b>			
Real Estate	\$ 3,326	Avg. Emergency Costs		\$ 867		
Vehicles and Equipment	\$ 1,909	Outsourcing Level		41%		
Office Start-up	\$ 66					
<b>Total Non-recurring Costs</b>	<b>\$ 5,300</b>					

\*All figures in thousands of nominal dollars.

**Figure 5-9: All Functions -- Equipment and Facility Needs**

<b>Equipment Needs</b>				<b>Facility Needs</b>	
	Number of Pieces	Cost Per Piece	Total Cost		
<b>Maintenance/Operations Equipment</b>				<b>Needs</b>	
Arrow Signs - Trailer Mounted	2	\$ 6,753	\$ 13,506	Number of	1
Backhoes & Attachments	1	\$ 122,033	\$ 122,033	Sq ft of	0
Dump Trucks- Large	1	\$ 117,447	\$ 117,447	<b>Maintenance Yard Costs</b>	
Dump Trucks- Standard	3	\$ 88,887	\$ 266,661	Land (9 acres)	\$ 911,662
Dump Trucks- 1 Ton	1	\$ 41,320	\$ 41,320	Yard Build-out	\$ 1,350,611
Gradall	1	\$ 225,000	\$ 225,000	Building Cost	\$ 804,739
Motor Grader	1	\$ 144,440	\$ 144,440	Chemical Storage	\$ 258,867
Mowers - Tractor Attachments	4	\$ 71,132	\$ 284,529	<b>Total</b>	<b>\$ 3,325,879</b>
Pickup Trucks	11	\$ 33,968	\$ 373,646		
Snowplows	12	\$ 3,613	\$ 43,355		
Spreaders	6	\$ 6,854	\$ 41,126		
Tractors w/ Misc. Attachments	1	\$ 43,220	\$ 43,220		
Trucks - Crash Cushion Vehicle	2	\$ 79,011	\$ 158,021		
Variable Message Signs	2	\$ 17,220	\$ 34,441		
<b>Subtotal</b>			<b>\$ 1,908,744</b>		
<b>Office Equipment</b>					
Computers	10	\$ 2,251	\$ 22,510		
Telephones/Telephone System	13	\$ 281	\$ 3,658		
Copier/Printer/etc.	2	\$ 5,628	\$ 11,255		
Desks/Chairs/etc.	10	\$ 1,688	\$ 16,883		
Misc. Office Set-up	2	\$ 5,628	\$ 11,255		
<b>Subtotal</b>			<b>\$ 65,561</b>		
<b>Total Equipment Costs</b>			<b>\$ 1,974,305</b>		

Staffing for a James City County *all functions* program would require 24 staff members due to the need for traffic engineering and permitting staff in addition to the personnel estimated for the *maintenance only* or *maintenance and construction* scenarios.<sup>11</sup> The

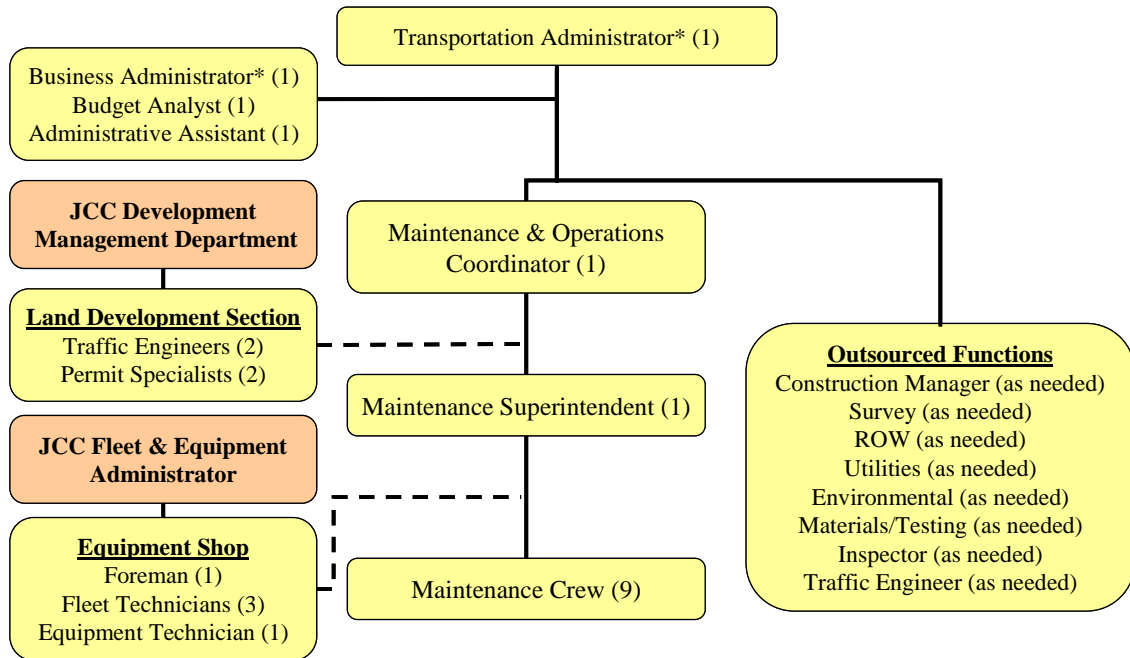
<sup>11</sup> The traffic engineering and permitting staff would likely report directly to the James City County Development Management Department, but work for the Maintenance and Operations Coordinator.



staffing organization for this scenario, illustrated in **Figure 5-10**, and would include the following operations positions:

- **Traffic Engineer** – determines roadway speed limits, conducts site plan reviews, design/approval/operation of traffic signals and associated systems, and conducts traffic studies and counts (Traffic Engineering Technicians also support this function as needed).
- **Subdivision/Permit Specialist** – review and approve all access permit requests, monitors permit compliance, reviews subdivision construction plans, and inspects subdivision street construction. It is assumed that this position would coordinate reviews with the County's existing land development staff (Note: the secondary roads analysis model estimates that 3 positions are needed in FY00 based on growth factors).

**Figure 5-10: All Functions – Proposed Organization Chart**



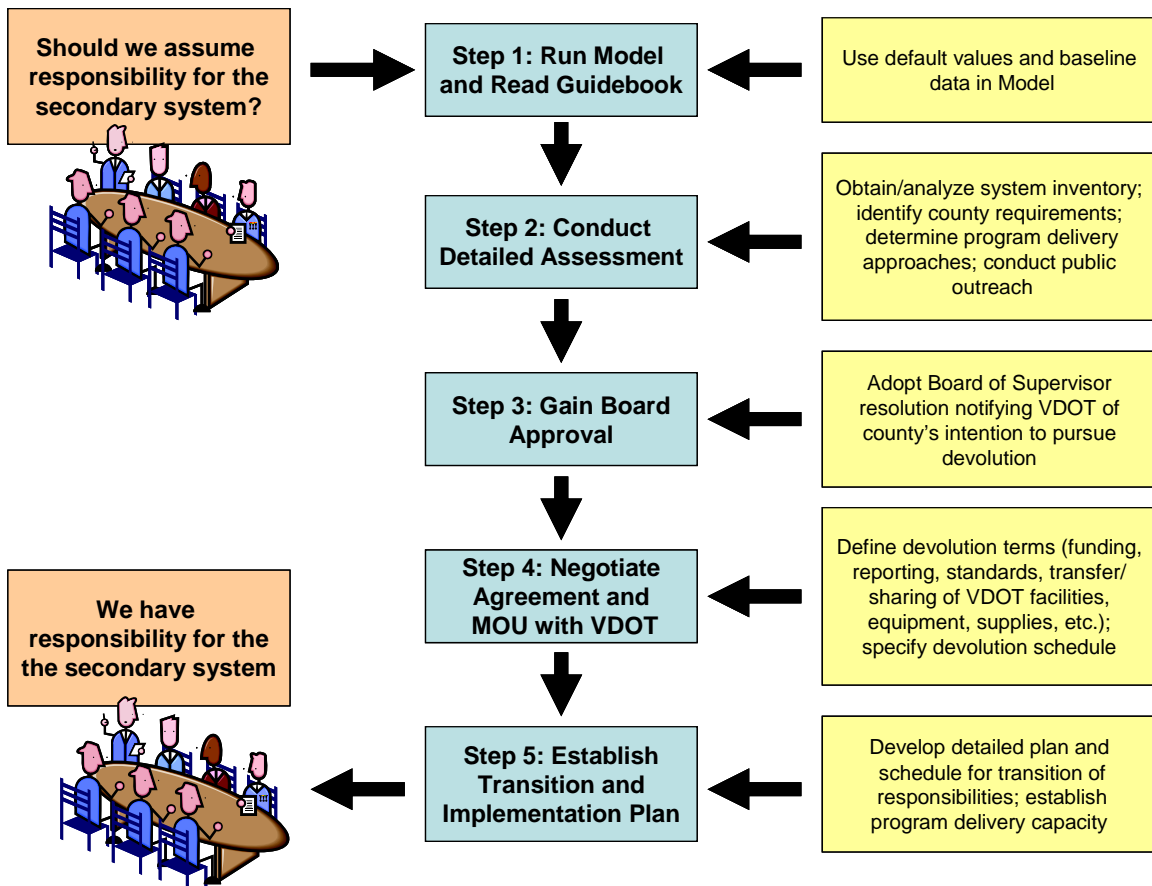
\*Positions filled by existing or planned JCC staff.

## 6 Next Steps

The information and analyses provided in this report should provide James City County staff and the County Board of Supervisors with a broad, high-level look at the costs and implications of assuming different secondary system functions. The County now has several options to consider, including: 1) move forward with assuming some or all secondary road functions, 2) conduct more in-depth analysis of devolution issues and considerations before determining a course of action; or 3) disregard the idea of assuming secondary system responsibilities.

Whether or not James City County decides to move forward with some version of devolution at this time, it is important to define the process for assuming secondary system responsibilities. This process or “road map” is illustrated in **Figure 6-1** and discussed in this section.

**Figure 6-1: Devolution Process**



- **Step 1: Initial Assessment** – as a first step, a county should assess the magnitude of responsibilities, costs, and institutional requirements (i.e., the staffing, facilities, and equipment needs) that they would assume under different devolutions options. The Secondary System Analysis Model provides a tool for conducting this assessment based on a wide range of default and user-selected assumptions. As part of this initial assessment, a county should consider clearly defining what it wants to achieve by assuming some or all secondary road responsibilities (*maintenance only, construction only, maintenance and construction, and maintenance, construction, and operations*).
- **Step 2: Detailed Analysis** – a county that wishes to move to the next step in devolution decision-making should plan to conduct significant due diligence on both the system responsibilities it is considering assuming and its own capabilities and resources to deliver a transportation program. The Secondary System Analysis Model provides a tool for conducting much of this analysis. Key considerations a county might explore as part of this analysis include the following:
  - ⇒ **Public Outreach** – a county may wish to conduct public involvement meetings to hear citizen and stakeholder concerns, issues, and expectations, and to gain public buy-in for a county devolution initiative. While the *Code of Virginia* is silent regarding requirements for public involvement as part of the devolution process, options range from open discussion at public meetings to formal, countywide referenda. A county should both consider the need for public outreach and plan for the time it will take to adequately conduct these efforts.
  - ⇒ **System Assessment** – a county should plan to collect and analyze all readily available information on system conditions. Based on the strength of existing data, a county may then determine if it wishes to pursue the collection and analysis of additional system condition information.
  - ⇒ **Resource Availability** – a county should evaluate how the current county government organization (e.g., procurement, human resources, and legal departments), staff, facilities (e.g. office space and maintenance yards), and equipment could be leveraged to support administration of a secondary roads program and help minimize costs.
  - ⇒ **Program Delivery Approaches** – a county should explore the implications, as well as their rationale and motivations, for delivering assumed responsibilities through different combinations of in-house staffing and outsourcing.
- **Step 3: Board Approval** – once a county has made the decision to pursue devolution of some or all secondary road responsibilities, its Board of

Supervisors must adopt a resolution notifying VDOT of the county's intent to enter into devolution negotiations. Similar to the process used with the Urban Construction Initiative, this resolution will need to be submitted no later than July 1<sup>st</sup> for potential assumption of responsibilities the following July 1<sup>st</sup> or for some time after that.

- **Step 4: Negotiations** – a county will enter into discussions and negotiations with VDOT to develop a devolution agreement and MOU that will define the terms of a devolution arrangement. A county should prepare for this negotiation by determining what it “wants” and what it will “accept” in return for assuming a specific set of secondary road responsibilities. Counties should recognize, however, that VDOT will need to consider broad policy issues, legislation, and/or efforts to ensure statewide consistency during the development of the devolution agreement and MOU terms. Key topics that will likely be addressed as part of this negotiation include the following:
  - ⇒ **County Responsibilities** – the agreement and/or MOU will define the specific activities a county will assume, including any unique activities that a county is not taking over (e.g., the optional countywide functions under construction).
  - ⇒ **VDOT Responsibilities** – the agreement and/or MOU will identify responsibilities that will remain with VDOT and/or be shared with VDOT during both the transition period and once devolution is complete (e.g., plan review, permitting, etc.).
  - ⇒ **Funding** – the agreement and/or MOU will identify the annual level of funding a county receives for maintenance and/or operations funding (construction funding will be determined by the SSYP), and identify the basis for annual increases in funding allocations due to inflation and system expansion.<sup>12</sup> The agreement/MOU also will identify any payments VDOT offers to a county to support start-up activities.
  - ⇒ **Liabilities** – the agreement and/or MOU will define county, VDOT, and shared liabilities.
  - ⇒ **Facilities and Equipment** – the agreement and/or MOU may identify any VDOT facilities (e.g., surplus area headquarters or chemical storage facilities) or equipment that will be transferred, sold, leased or otherwise be available to a county and will document the terms of these arrangements.
  - ⇒ **VDOT Support and Information** – the MOU may define specific types, levels, and the duration of technical support and information that VDOT will provide a county.

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<sup>12</sup> This will be a different process than is currently used to determine the annual highway allocations from VDOT to Arlington and Henrico County, which are defined in the *Code of Virginia*.

- ⇒ **Standards and Reporting** – the agreement and MOU will identify how VDOT will oversee any applicable standards and define specific county reporting requirements.
- ⇒ **Timeframes** – the agreement and MOU will define the timeframe for a county assuming specific secondary system responsibilities.
- **Step 5: Transition and Implementation** – the final step in the devolution process will be the transition of functions to county responsibility and performance of those responsibilities by James City County. The transition process can be expected to take at least one year. The agreement and MOU should be fully executed at least 60 days prior to the proposed implementation date. To ensure it is adequately prepared for this phase of devolution, a county should consider developing a detailed plan that, at a minimum, delineates an approach and timeline to address the following considerations:
  - ⇒ **Policies, Rules, and Standards** – areas where county-specific policies, rules, and standards will be required.
  - ⇒ **Information Systems** – identification and provisioning of system needs for administrative office functions (accounting, procurement, asset management, etc.).
  - ⇒ **Program Delivery Resources** – determination of how program responsibilities will be delivered (in-house vs. outsourcing) and hiring of staff, establishing on-call contracts, etc.
  - ⇒ **Equipment and Facilities** – determining the need for, and acquiring, equipment and facilities.
  - ⇒ **Public Information** – determining how public outreach and customer calls/complaints will be handled.

**Appendix A: James City County Federally Eligible Secondary System Inventory**

James City County Federally Eligible Secondary Route Inventory					
Route #	Facility Name	Segment From	Segment To	Segment Length	Area Type
603	DIASCUND ROAD	FORGE ROAD	RICHMOND ROAD WEST	3.77	Rural
607	CROAKER ROAD	RICHMOND ROAD	ROSE LANE	0.51	Rural
607	CROAKER ROAD	ROSE LANE	ROCHAMBEAU DRIVE	0.38	Rural
607	CROAKER ROAD	ROCHAMBEAU DRIVE	RTE I-64	0.3	Rural
607	CROAKER ROAD	RTE I-64	FENTON MILL ROAD	0.3	Rural
607	CROAKER ROAD	FENTON MILL ROAD	WARE CREEK ROAD	0.73	Rural
607	CROAKER ROAD	WARE CREEK ROAD	CROAKER LANDING ROAD	1.92	Rural
610	FORGE ROAD	DIASCUND ROAD	RICHMOND ROAD	3.1	Rural
612	LONGHILL ROAD	CENTERVILLE ROAD	LONG HILL SWAMP BRIDGE	1.41	Urbanized
612	LONGHILL ROAD	LONG HILL SWAMP BRIDGE	SEASONS TRACE	0.2	Urbanized
612	LONGHILL ROAD	SEASONS TRACE	OLDE TOWNE ROAD	0.78	Urbanized
612	LONGHILL ROAD	OLDE TOWNE ROAD	RTE 199	0.66	Urbanized
612	LONGHILL ROAD	RTE 199	LONG HILL ROAD CONN	1.9	Urbanized
613	NEWS ROAD	CENTERVILLE ROAD	POWHATAN SECONDARY	2.2	Urbanized
613	NEWS ROAD	POWHATAN SECONDARY	MONTICELLO AVENUE	0.8	Urbanized
613	NEWS ROAD	MONTICELLO AVENUE	IRONBOUND ROAD	0.12	Urbanized
614	GREENSPRINGS ROAD	RTE F665 JOHN TYLER MEMORIAL HIGHWAY	JOHN TYLER MEMORIAL HIGHWAY	1.99	Urbanized
614	CENTERVILLE ROAD	MONTICELLO AVENUE	MONTICELLO AVENUE	0.76	Urbanized
614	CENTERVILLE ROAD	BRICK BAT ROAD	BRICK BAT ROAD	1.66	Urbanized
614	CENTERVILLE ROAD	JOLLY POND ROAD	JOLLY POND ROAD	2.07	Urbanized
614	CENTERVILLE ROAD	JOLLY POND ROAD	LONG HILL ROAD	1.19	Urbanized
614	CENTERVILLE ROAD	LONG HILL ROAD	ADAMS HUNT DRIVE	1.81	Urbanized
614	CENTERVILLE ROAD	ADAMS HUNT DRIVE	RICHMOND ROAD	1.27	Urbanized
615	IRONBOUND ROAD	SANDY BAY ROAD JOHN TYLER MEMORIAL HIGHWAY	JOHN TYLER MEMORIAL HIGHWAY	0.67	Urbanized
615	IRONBOUND ROAD	HIGHWAY	NEWS ROAD	1.45	Urbanized
615	IRONBOUND ROAD	STRAWBERRY PLAINS ROAD	MONTICELLO AVENUE	0.13	Urbanized

**James City County Devolution Analysis Report**

<b>James City County Federally Eligible Secondary Route Inventory</b>					
<b>Route #</b>	<b>Facility Name</b>	<b>Segment From</b>	<b>Segment To</b>	<b>Segment Length</b>	<b>Area Type</b>
615	IRONBOUND ROAD	MONTICELLO AVENUE	WILLIAMSBURG CL	0.76	Urbanized
615	LONGHILL ROAD CONNECTOR STRAWBERRY PLAINS ROAD	IRONBOUND ROAD	LONGHILL ROAD	0.9	Urbanized
616	LAKE POWELL ROAD	WILLIAMSBURG CL	IRONBOUND ROAD	1.12	Urbanized
617	CHICKAHOMINY ROAD	TREASURE ISLAND ROAD	BROOKWOOD DRIVE	1.16	Urbanized
631	NEWMAN ROAD	RTE 632	RTE 60	2.1	Rural
646	NEWMAN RD	YORK CL	RTE 768	0.5	Rural
646	OLD TOWNE ROAD	RTE 768	RTE 606	1.01	Rural
658	OLD TOWNE ROAD	RTE 612	RTE 1513	0.91	Urbanized
658	OLD TOWNE ROAD	RTE 1513	RTE 1514	0.27	Urbanized
658	OLD TOWNE ROAD	RTE 1514	RTE 60	0.18	Urbanized
665	RTE F665	JAMESTOWN ROAD	GREENSPRINGS ROAD	0.24	Urbanized
681	SANDY BAY ROAD	JAMESTOWN ROAD	IRONBOUND ROAD	0.27	Urbanized
700	BROOKWOOD DRIVE	LAKE POWELL ROAD	RTE 199	0.08	Urbanized
900	MONTICELLO AVENUE	WILLIAMSBURG CL	TREYBURN DRIVE	0.08	Urbanized
980	TREYBURN DRIVE	MONTICELLO AVENUE	WINDBROOK LANE	0.25	Urbanized
5000	MONTICELLO AVENUE	RTE 5(J TYLER MEM HWY)	RTE 614(CENTERVILLE RD)	1.15	Urbanized
5000	MONTICELLO AVENUE	RTE 614(CENTERVILLE RD)	RTE 613 (NEWS RD)	2.83	Urbanized

## **Appendix B: Devolution Scenario Analyses**

The following section provides detailed outputs from the Secondary System Analysis Model for each of the four devolution scenarios.



## Feasibility Model for Secondary System Assumption by Virginia Counties®

User

File Name

Run Date

**General Instructions**

1. Enter your name, file name, and analysis date in the yellow boxes on this page
2. If needed, click the "Reset Model" box to restore model defaults (note: all inputs will be lost if file is not saved first)
3. Click on the "Start Analysis" button to begin using the model
4. Select options using the various drop down menus and check boxes
5. Figures in white boxes are generated by the model and cannot be adjusted
6. Areas where user input is required or an option are identified by yellow boxes
7. Place your cursor over red triangles to receive additional information or guidance
8. Use the arrow buttons at the bottom of each page or the quick links boxes to navigate the model
9. All pages have been preformatted for printing, select print from you tool menu and print the active sheet
10. Save files under a new name if you wish to save the results

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**Feasibility Model for Secondary System Assumption v1.0**

Version: JCC Maintenance Only  
 County: James City  
 Scope of Analysis: Maintenance Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/4/2007      User: craig secrest

**General Inputs**

**Baseline Considerations**

**Select County**

**Select Devolution Option**

**Select Start Year**

**Inflation Rate**

**Overhead Factors**

**System Growth (optional)**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Additional Lane Miles	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Additional Structures	0	0	0	0	0	0	0	0	0	0

Enter number of lane miles and bridges/structures added each year.

**Maintenance and Operations Program Options**

**Maintenance & Operations Areas**

Pipes & Drains	<input type="text" value="Input Percent Above/Below Default"/>	<b>Above/Below Default</b>
Roadside	<input type="text" value="Use Default Drivers"/>	<input type="text" value="10%"/>
Traffic Devices	<input type="text" value="Use Default Drivers"/>	
Pavement	<input type="text" value="Use Default Drivers"/>	
Structures	<input type="text" value="Use Default Drivers"/>	
Special Facilities	<input type="text" value="Use Default Drivers"/>	
Snow Removal	<input type="text" value="Use Default Drivers"/>	
Operations	<input type="text" value="Use Default Drivers"/>	

**Construction Program Options**

**Additional Construction (Optional)**

**Select County-wide Construction Functions to Assl** \*Note: user must select all functions if selecting maintenance, construction, and operations option.

<input type="checkbox"/> Pipe & Entrance	<input type="checkbox"/> Engineering & Survey
<input type="checkbox"/> Traffic Calming	<input type="checkbox"/> Traffic Services
<input type="checkbox"/> Rural Additions	<input type="checkbox"/>

# James City County Devolution Analysis Report

<b>Feasibility Model for Secondary System Assumption v1.0</b> Version JCC Maintenance Only County: James City Scope of Analysis: Maintenance Only Devolution Start Date: FY 2009 Date of Analysis: 2/28/2007      Today's Date: 3/4/2007      User: craig secrest																																																																																																																		
Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Staffing Outputs	Equipment Outputs	Facility Outputs																																																																																																											
<b>Program Cost Estimates</b> Assumptions Summary																																																																																																																		
<b>Out-year Inflation Rate</b> <input style="width: 50px;" type="text" value="3%"/>  <b>Overhead Rate/Amount</b> <b>Rate</b> Maintenance <input style="width: 50px;" type="text" value="17.6%"/> Operations <input style="width: 50px;" type="text" value="17.6%"/>	<b>M&amp;O Program Service Options</b> Pipes & Drains Roadside Traffic Devices Pavement Structures Special Facilities Snow Removal Operations					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th style="text-align: left;">Defined Level of Service</th></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> </table>		Defined Level of Service	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	<b>Plus/Minus Default</b> <input style="width: 50px;" type="text" value="10%"/>																																																																																																	
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Real Estate <input style="width: 50px;" type="text" value="\$ 3,325,879"/> Vehicles and Equipment <input style="width: 50px;" type="text" value="\$ 1,637,001"/> Office Set-up <input style="width: 50px;" type="text" value="\$ 36,860"/> <b>Total Up Front Costs</b> <input style="width: 50px;" type="text" value="\$ 4,999,740"/>	Average Annual Emergency Costs <input style="width: 50px;" type="text" value="\$ 867,087"/> Percent of M&O Outsourced <input style="width: 50px;" type="text" value="41%"/> Percent of System "Federal Eligible" <input style="width: 50px;" type="text" value="11%"/>																																																																																																																	

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Name of Run/File: JCC Maintenance Only  
 County: James City  
 Scope of Analysis: Maintenance Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/4/2007      User: craig secret

Intro Page	General Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facility Outputs
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**Staffing Inputs Page**

Percent Outsourced       The default FTE requirement for maintenance/operations staff reflects VDOT's average historical in-house/outsourcing mix for the [Hampton Roads District](#).

Position Description	Recommended Number of FTEs	Check to Manually Set FTE Needs	Input Revised FTE Need	Revised FTE Needs	Adjustments to Hiring Needs:	
					# of FTEs from Existing Co. Staff	# of FTEs Outsourced
<b>General Management</b>						
Transportation Director	1	<input type="checkbox"/>		1	1	-
Administrative Support	1	<input type="checkbox"/>		1	-	-
Chief Engineer (optional)	-	<input type="checkbox"/>		-	-	-
Contracts Administrator	1	<input type="checkbox"/>		1	1	-
Business Administrator	1	<input checked="" type="checkbox"/>	-	-	-	-
Human Resources Specialist	1	<input checked="" type="checkbox"/>	-	-	-	-
Other <input style="width: 100px;" type="text" value="Budget Analyst"/>	-		1	1	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Maintenance Staff</b>						
Assistant Director - Maintenance/Operations	-	<input checked="" type="checkbox"/>	1	1	-	-
Maintenance Superintendent	1	<input type="checkbox"/>		1	-	-
Assistant Maintenance Superintendent	-	<input type="checkbox"/>		-	-	-
Maintenance Supervisor	1	<input checked="" type="checkbox"/>	-	-	-	-
Maintenance Crew Members	9	<input type="checkbox"/>		9	-	-
Fiscal Assistant/Time Keeper	1	<input checked="" type="checkbox"/>	-	-	-	-
Equipment Shop Staff	3	<input checked="" type="checkbox"/>	4	4	-	-
Other <input style="width: 100px;" type="text" value="Equipment Shop Foreman"/>	-		1	1	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Operations (Land Development) Staff</b>						
Traffic Engineer	-	<input type="checkbox"/>		-	-	-
Jr. Traffic Engineer/Tech	-	<input type="checkbox"/>		-	-	-
Permitting Specialist	-	<input type="checkbox"/>		-	-	-
Combined Traffic Eng./Permit Spec.	-	<input type="checkbox"/>		-	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Core Construction Staff</b>						
Assistant Director - Construction	-	<input type="checkbox"/>		-	-	-
Engineering Techs/Designer	-	<input type="checkbox"/>		-	-	-
Construction Project Manager	-	<input type="checkbox"/>		-	-	-
<b>User-defined Construction Staff</b>						
Surveyor	-	<input type="checkbox"/>		-	-	-
ROW Specialist	-	<input type="checkbox"/>		-	-	-
Utilities Specialist	-	<input type="checkbox"/>		-	-	-
Environmental	-	<input type="checkbox"/>		-	-	-
Materials & Testing Specialist	-	<input type="checkbox"/>		-	-	-
Traffic Engineer	-	<input type="checkbox"/>		-	-	-
Senior Inspector	-	<input type="checkbox"/>		-	-	-
Junior Inspector	-	<input type="checkbox"/>		-	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Total Staffing</b>	<b>20</b>			<b>20</b>	<b>2</b>	<b>-</b>

\*Sum of input county and outsourced FTEs can not exceed FTE requirement/Input number of FTEs

# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption v1.0

Version: JCC Maintenance Only

County: James City

Scope of Analysis: Maintenance Only

Devolution Start Date: FY 2009

Date of Analysis: 2/28/2007

Today's Date: 3/4/2007

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Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Equipment Outputs	Facilities Outputs
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### Staffing Needs Forecast

Position Description	FTEs Requirements	FTEs Filled w/ Existing Co. Staff	Outsourced FTEs	Additional Staffing Needs
<b>General Management</b>				
Transportation Director	1	1	-	-
Administrative Support	1	-	-	1
Chief Engineer (optional)	-	-	-	-
Contracts Administrator	1	1	-	-
Business Administrator	-	-	-	-
Human Resources Specialist	-	-	-	-
Other <input type="text" value="Budget Analyst"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Maintenance Staff</b>				
Assistant Director - Maintenance/Operations	1	-	-	1
Maintenance Superintendent	1	-	-	1
Assistant Maintenance Superintendent	-	-	-	-
Maintenance Supervisor	-	-	-	-
Maintenance Crew Members	9	-	-	9
Fiscal Assistant/Time Keeper	-	-	-	-
Equipment Shop Staff	4	-	-	4
Other <input type="text" value="Equipment Shop Foreman"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Operations (Land Development) Staff</b>				
Traffic Engineer (ops)	-	-	-	-
Jr. Traffic Engineer/Tech	-	-	-	-
Permitting Specialist	-	-	-	-
Combined Traffic Eng./Permit Spec.	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Core Construction Staff</b>				
Assistant Director - Construction	-	-	-	-
Engineering Techs/Designer	-	-	-	-
Construction Project Manager	-	-	-	-
<b>User-defined Construction Staff</b>				
Surveyor	-	-	-	-
ROW Specialist	-	-	-	-
Utilities Specialist	-	-	-	-
Environmental	-	-	-	-
Materials & Testing Specialist	-	-	-	-
Traffic Engineer	-	-	-	-
Senior Inspector	-	-	-	-
Junior Inspector	-	-	-	-
Other <input type="text"/>	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Total FTEs</b>	<b>20</b>	<b>2</b>	<b>-</b>	<b>18</b>

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
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General Inputs
Staffing Inputs
Facilities Inputs
Cost Outputs
Staffing Outputs
Equipment Outputs
Facilities Outputs

Equipment Inputs														
(Default Costs in 2005 \$\$/Enter All New Costs in 2005 \$\$)														
	Default Need	Adjust Need	Input Need	Default Cost/Item	Adjust Cost	Input New Cost		Default Need	Adjust Need	Input Need	Default Cost/Item	Adjust Cost	Input New Cost	
<b>Recommended M&amp;O Equipment</b>														
Air Compressors	1	<input checked="" type="checkbox"/>	-	\$ 23,600							\$ 500			
Arrow Signs - Trailer Mounted	2	<input type="checkbox"/>		\$ 6,000							\$ 7,400			
Asphalt Haulers	1	<input checked="" type="checkbox"/>	-	\$ 16,800							\$ 1,500			
Asphalt Kettles	1	<input checked="" type="checkbox"/>	-	\$ 9,000							\$ 12,200			
Backhoes w/ Attachments	1	<input type="checkbox"/>		\$ 108,425							\$ 138,183			
Brooms - Truck Attachment	1	<input checked="" type="checkbox"/>	-	\$ 3,055							\$ 1,125			
Brush Chippers	1	<input checked="" type="checkbox"/>	-	\$ 21,050							\$ 59,733			
Compactors	1	<input checked="" type="checkbox"/>	-	\$ 1,365							\$ 3,300			
Concrete Mixers & Mortar Mixers	1	<input checked="" type="checkbox"/>	-	\$ 1,470							\$ 800			
Ditching Trucks	1	<input checked="" type="checkbox"/>	-	\$ 255,700							\$ 76,000			
Dump Trucks - Large	1	<input type="checkbox"/>		\$ 104,350							\$ 82,233			
Dump Trucks - Standard	3	<input type="checkbox"/>		\$ 78,975							\$ 21,800			
Dump Trucks - 1 Ton	1	<input type="checkbox"/>		\$ 36,712							\$ 48,800			
Excavators	1	<input checked="" type="checkbox"/>	-	\$ 193,833							\$ 3,500			
Generators	2	<input checked="" type="checkbox"/>	-	\$ 5,300										
Graders	1	<input type="checkbox"/>		\$ 128,333										
Loaders - Large	1	<input checked="" type="checkbox"/>	-	\$ 100,100							\$ 30,180			
Loaders - Small (Bobcat)	1	<input checked="" type="checkbox"/>	-	\$ 38,200										
Mowers - Small Riding	1	<input checked="" type="checkbox"/>	-	\$ 5,467										
Mowers - Tractor Attachments	2	<input checked="" type="checkbox"/>	4	\$ 63,200										
Mowers - Walk Behind	1	<input checked="" type="checkbox"/>	-	\$ 733										
Pavement Breakers	1	<input checked="" type="checkbox"/>	-	\$ 460										
Pavers/Patchers	1	<input checked="" type="checkbox"/>	-	\$ 92,200										
Pickup Trucks (Maintenance)	3	<input type="checkbox"/>		\$ 30,180							\$ 2,000			
Pickup Trucks (Operations)	-	<input checked="" type="checkbox"/>	-	\$ 30,180							\$ 250			
Rollers - 4 Ton 6 Ton Tandem	1	<input checked="" type="checkbox"/>	-	\$ 45,900							\$ 5,000			
Snowplows	12	<input type="checkbox"/>		\$ 3,210							\$ 5,000			
Sprayers - Chemical	1	<input checked="" type="checkbox"/>	-	\$ 26,550										
Spreaders - Abrasive	12	<input checked="" type="checkbox"/>	6	\$ 6,090										
Steam Cleaners	1	<input checked="" type="checkbox"/>	-	\$ 3,400										
Sweepers	1	<input checked="" type="checkbox"/>	-	\$ 94,566										
Tanks - Water Sprinkler	1	<input checked="" type="checkbox"/>	-	\$ 400										
Tractors w/ Misc. Attachments	2	<input checked="" type="checkbox"/>	1	\$ 38,400										
Trailers - Other	1	<input checked="" type="checkbox"/>	-	\$ 36,400										
Trucks - Bridge	1	<input checked="" type="checkbox"/>	-	\$ 106,525										
Trucks - Bucket	1	<input checked="" type="checkbox"/>	-	\$ 118,191										
Trucks - Crash Cushion Vehicle	2	<input type="checkbox"/>		\$ 70,200										
Trucks - Utility Body & Crane	1	<input checked="" type="checkbox"/>	-	\$ 47,600										
Vac. All Trucks	1	<input checked="" type="checkbox"/>	-	\$ 182,400										
VMS - Trailer Mounted	2	<input type="checkbox"/>		\$ 15,300										
Miscellaneous	1	<input checked="" type="checkbox"/>	-	\$ 20,000										
<b>Optional M&amp;O Equipment</b>														
Augers		<input type="checkbox"/>									\$ 500			
Equipment		<input type="checkbox"/>									\$ 7,400			
Concrete Vibrators		<input type="checkbox"/>									\$ 1,500			
Lights - Portable Work		<input type="checkbox"/>									\$ 12,200			
Loaders - Other		<input type="checkbox"/>									\$ 138,183			
Post Drivers & Pullers		<input type="checkbox"/>									\$ 1,125			
Rollers - Other		<input type="checkbox"/>									\$ 59,733			
Rotary Tillers		<input type="checkbox"/>									\$ 3,300			
Sign Cleaners		<input type="checkbox"/>									\$ 800			
Snow Blowers - Loader-Mounted		<input type="checkbox"/>									\$ 76,000			
Sprayers - Seed and Fertilizer		<input type="checkbox"/>									\$ 82,233			
SUVs - Maintenance		<input type="checkbox"/>									\$ 21,800			
Trenchers		<input type="checkbox"/>									\$ 48,800			
Welders		<input type="checkbox"/>									\$ 3,500			
<b>Construction Equipment</b>														
(Construction)		<input type="checkbox"/>									\$ 30,180			
<b>Office Equipment</b>														
Computers		<input type="checkbox"/>									\$ 2,000			
Telephones/Telephone System		<input type="checkbox"/>									\$ 250			
Copier/Printer/etc.		<input type="checkbox"/>									\$ 5,000			
Desks/Chairs/etc.		<input type="checkbox"/>									\$ 1,500			
Miscellaneous		<input type="checkbox"/>									\$ 5,000			
<b>Additional Equipment/Supplies</b>														
Gradall											1	\$ 225,000		
												\$ -		
												\$ -		
												\$ -		
												\$ -		
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												\$ -		

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maintenance Only  
 County: James City  
 Scope of Analysis: Maintenance Only  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007 Today's Date: 3/4/2007 User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Facilities Outputs
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**Equipment Requirements Forecast**

**Costs** \$ 1,673,862

**Itemized Equipment List**

	Number of Pieces	Cost Per Piece	Total Cost		Number of Pieces	Cost Per Piece	Total Cost
<b>Field Equipment</b>				<b>Optional Field Equipment</b>			
Air Compressors	0	\$ 26,562	\$ -	Augers	0	\$ 563	\$ -
Arrow Signs - Trailer	2	\$ 6,753	\$ 13,506	Communications/Intercom	0	\$ 8,329	\$ -
Asphalt Haulers	0	\$ 18,909	\$ -	Concrete Vibrators	0	\$ 1,688	\$ -
Asphalt Kettles	0	\$ 10,130	\$ -	Lights - Portable Work	0	\$ 13,731	\$ -
Backhoes w/ Attachments	1	\$ 122,033	\$ 122,033	Loaders - Other	0	\$ 155,526	\$ -
Brooms - Truck Attachment	0	\$ 3,438	\$ -	Post Drivers & Pullers	0	\$ 1,266	\$ -
Brush Chippers	0	\$ 23,692	\$ -	Rollers - Other	0	\$ 67,230	\$ -
Compactors	0	\$ 1,536	\$ -	Rotary Tillers	0	\$ 3,714	\$ -
Concrete Mixers & Mortar	0	\$ 1,654	\$ -	Sign Cleaners	0	\$ 900	\$ -
Ditching Trucks	0	\$ 287,793	\$ -	Snow Blowers - Loader-Mounted	0	\$ 85,539	\$ -
Dump Trucks - Large	1	\$ 117,447	\$ 117,447	Sprayers - Seed and Fertilizer	0	\$ 92,554	\$ -
Dump Trucks - Standard	3	\$ 88,887	\$ 266,661	SUVs - Maintenance	0	\$ 24,536	\$ -
Dump Trucks - 1 Ton	1	\$ 41,320	\$ 41,320	Trenchers	0	\$ 54,925	\$ -
Excavators	0	\$ 218,161	\$ -	Welders - Small	0	\$ 3,939	\$ -
Generators	0	\$ 5,965	\$ -				
Graders	1	\$ 144,440	\$ 144,440	<b>Construction Equipment</b>			
Loaders - Large	0	\$ 112,663	\$ -	Pickup Truck	0	\$ 33,968	\$ -
Loaders - Small (Bobcat)	0	\$ 42,994	\$ -				
Mowers - Small Riding	0	\$ 6,153	\$ -	<b>Office Equipment</b>			
Mowers - Tractor	4	\$ 71,132	\$ 284,529	Computers	6	\$ 2,251	\$ 13,506
Mowers - Walk Behind	0	\$ 825	\$ -	Telephones/Telephone System	7	\$ 281	\$ 1,970
Pavement Breakers	0	\$ 518	\$ -	Copier/printer/etc.	1	\$ 5,628	\$ 5,628
Pavers/Patchers	0	\$ 103,772	\$ -	Desks/Chairs/etc.	6	\$ 1,688	\$ 10,130
Pickup Trucks (Maintenance)	3	\$ 33,968	\$ 101,904	Misc.	1	\$ 5,628	\$ 5,628
Pickup Trucks (Operations)	0	\$ 33,968	\$ -				
Rollers - 4 Ton 6 Ton	0	\$ 51,661	\$ -	<b>Additional Equipment/Supplies</b>			
Snowplows	12	\$ 3,613	\$ 43,355	<b>Gradall</b>	1	\$ 225,000	\$ 225,000
Sprayers - Chemical	0	\$ 29,882	\$ -		-	\$ -	\$ -
Spreaders - Abrasive	6	\$ 6,854	\$ 41,126		-	\$ -	\$ -
Steam Cleaners	0	\$ 3,827	\$ -		-	\$ -	\$ -
Sweepers	0	\$ 106,435	\$ -		-	\$ -	\$ -
Tanks - Water Sprinkler	0	\$ 450	\$ -		-	\$ -	\$ -
Tractors w/ Misc.	1	\$ 43,220	\$ 43,220		-	\$ -	\$ -
Trailers - Other	0	\$ 40,969	\$ -		-	\$ -	\$ -
Trucks - Bridge	0	\$ 119,895	\$ -		-	\$ -	\$ -
Trucks - Bucket	0	\$ 133,025	\$ -		-	\$ -	\$ -
Trucks - Crash Cushion	2	\$ 79,011	\$ 158,021		-	\$ -	\$ -
Trucks - Utility Body & Crane	0	\$ 53,574	\$ -		-	\$ -	\$ -
Vac. All Trucks	0	\$ 205,293	\$ -		-	\$ -	\$ -
VMS - Trailer Mounted	2	\$ 17,220	\$ 34,441		-	\$ -	\$ -
Miscellaneous	0	\$ 22,510	\$ -		-	\$ -	\$ -

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maintenance Only  
 County: James City  
 Scope of Analysis: Maintenance Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 3/27/2007      Today's Date: 3/27/2007      User: Craig Secret

Intro Page	General Inputs	Staffing Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facilities Outputs
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## Facilities Inputs

**Part I: Maintenance/Operations Facilities**

**Select Area Headquarters (AHQ) Driver**  
 Default Number of Area HQs:       **Number of AHQs**:       **AHQ Build-out Requirement\***: Assume All AHQs Need Build-out

\*Note: counties should consider the availability of surplus VDOT AHQs.

Build-out Costs	Default # of Elements	Adjust Need	Input Need	Default Cost Per Area HQ (2005 \$)	Change Cost Basis	Input New Costs
Land Cost (9 acre lot)	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 810,000	<input type="checkbox"/>	
Yard Build-out Cost	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 1,200,000	<input type="checkbox"/>	
Buildings Cost	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 715,000	<input type="checkbox"/>	
Chemical Facilities	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 230,000	<input type="checkbox"/>	
Other	<input type="text" value=""/>	<input type="checkbox"/>	<input type="text" value="-"/>		<input type="checkbox"/>	\$ -

Input cost basis component cost changes in 2005 \$.

**Part II: Construction Facilities (Office Space)**

NO OFFICE SPACE REQUIRED FOR MAINTENANCE ONLY SCENARIOS

**Office Space Options**: Use Existing County Space or Lease Space  
**Select Office Space Driver**: Default Number of sq ft:   
**Number of sq ft Required**:   
**Office Space Cost\***: Default Cost Per sq ft:   
**Default Cost Per sq ft**: \$

\*Note: enter costs in 2005 dollars; Office space input only applies if purchasing/building office space.

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maintenance Only  
 County: James City  
 Scope of Analysis: Maintenance Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/4/2007      User: craig secret

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs
------------	----------------	-----------------	-------------------	------------------	--------------	------------------	-------------------

## Non-recurring Facilities Cost Estimate

Maintenance Yard Costs	Cost/Area HQ	Total Cost	Office Space Requirements
Land	\$ 911,662	\$ 911,662	Number of sq ft: <input type="text" value="-"/>
Yard Build-out	\$ 1,350,611	\$ 1,350,611	Office Space Cost: <input type="text" value="\$ -"/>
Building Cost	\$ 804,739	\$ 804,739	
Chemical Storage	\$ 258,867	\$ 258,867	
Other	\$ -	\$ -	
<b>Total Costs</b>	<b>\$ 3,325,879</b>	<b>\$ 3,325,879</b>	

# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption by Virginia Counties®

Save Run

User

craig secrest

Start

Reset Model

File Name

JCC Construction Only

Print All

Run Date

February 28, 2007

General Inputs
Staffing Inputs
Equipment Inputs
Facility Inputs
Cost Outputs
Staffing Outputs
Equipment Outputs
Facility Outputs

**General Instructions**

1. Enter your name, file name, and analysis date in the yellow boxes on this page
2. If needed, click the "Reset Model" box to restore model defaults (note: all inputs will be lost if file is not saved first)
3. Click on the "Start Analysis" button to begin using the model
4. Select options using the various drop down menus and check boxes
5. Figures in white boxes are generated by the model and cannot be adjusted
6. Areas where user input is required or an option are identified by yellow boxes
7. Place your cursor over red triangles to receive additional information or guidance
8. Use the arrow buttons at the bottom of each page or the quick links boxes to navigate the model
9. All pages have been preformatted for printing, select print from you tool menu and print the active sheet
10. Save files under a new name if you wish to save the results

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### Feasibility Model for Secondary System Assumption v1.0

Version: JCC Construction Only  
 County: James City  
 Scope of Analysis Construction Only  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secrest

Intro Page
Staffing Inputs
Facilities Inputs
Equipment Inputs
Cost Outputs
Staffing Outputs
Equipment Outputs
Facility Outputs

#### General Inputs

**Baseline Considerations**

**Select County**

- Isle of Wight
- James City
- King & Queen
- King George
- King William

**Select Devolution Option**

- None
- Maintenance Only
- Construction Only
- Maintenance and Construction
- Maintenance, Construction, and Operations

**Select Start Year**

- FY 2007
- FY 2008
- FY 2009
- FY 2010

**Inflation Rate**

Default Values

**Overhead Factors**

Use Default Overhead Multipliers

**System Growth (optional)**

Input Future System Growth

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Additional Lane Miles	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Additional Structures	0	0	0	0	0	0	0	0	0	0

Enter number of lane miles and bridges/structures added each year.

**Maintenance and Operations Program Options**

**Maintenance & Operations Areas**

- Pipes & Drains: Use Default Drivers
- Roadside: Use Default Drivers
- Traffic Devices: Use Default Drivers
- Pavement: Use Default Drivers
- Structures: Use Default Drivers
- Special Facilities: Use Default Drivers
- Snow Removal: Use Default Drivers
- Operations: Use Default Drivers

**Construction Program Options**

**Additional Construction (Optional)**

Input Additional Projects

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Project Costs	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600
Number of Projects	0	0	3	3	3	3	3	3	3

Enter nominal dollar value (\$000s) AND number of additional construction projects.

**Select County-wide Construction Functions to Assu** \*Note: user must select all functions if selecting maintenance, construction, and operations option.

- Pipe & Entrance  Engineering & Survey
- Traffic Calming  Traffic Services
- Rural Additions



# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version JCC Construction Only  
 County: James City  
 Scope of Analysis: Construction Only  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Staffing Outputs	Equipment Outputs	Facility Outputs
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**Program Cost Estimates**  
Assumptions Summary

<p><b>Out-year Inflation Rate</b>      <input style="width: 50px;" type="text" value="3%"/></p> <p><b>Overhead Rate/Amount</b>      <b>Rate</b></p> <p>Maintenance      <input style="width: 50px;" type="text" value="17.6%"/></p> <p>Operations      <input style="width: 50px;" type="text" value="17.6%"/></p>	<p><b>M&amp;O Program Service Options</b></p> <p>Pipes &amp; Drains</p> <p>Roadside</p> <p>Traffic Devices</p> <p>Pavement</p> <p>Structures</p> <p>Special Facilities</p> <p>Snow Removal</p> <p>Operations</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> </table>	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance																																														
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<p><b>System/Construction Assumptions</b></p> <p>System Growth - Lane Miles</p> <p>System Growth - Bridges &amp; Structures</p> <p>Additional Construction Project Costs (\$000's)</p> <p>Number of Additional Projects</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> </tr> </thead> <tbody> <tr> <td>System Growth - Lane Miles</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>System Growth - Bridges &amp; Structures</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Additional Construction Project Costs (\$000's)</td> <td>N/A</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 1,150</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> </tr> <tr> <td>Number of Additional Projects</td> <td>N/A</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> </tr> </tbody> </table>			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	System Growth - Lane Miles	6	6	6	6	6	6	6	6	6	6	System Growth - Bridges & Structures	-	-	-	-	-	-	-	-	-	-	Additional Construction Project Costs (\$000's)	N/A	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	Number of Additional Projects	N/A	\$ -	\$ -	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015																																															
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Number of Additional Projects	N/A	\$ -	\$ -	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3																																															
<p><b>County-wide Construction Cost Center Functions Assumed</b>      (Optional under Maintenance Only and Maintenance &amp; Construction options)</p> <table style="width: 100%;"> <tr> <td style="width: 33%;">Pipe &amp; Entrance</td> <td style="width: 33%;"><input type="text" value="Yes"/></td> <td style="width: 33%;">Engineering &amp; Survey</td> <td style="width: 33%;"><input type="text" value="Yes"/></td> </tr> <tr> <td>Traffic Calming</td> <td><input type="text" value="Yes"/></td> <td>Traffic Services</td> <td><input type="text" value="Yes"/></td> </tr> <tr> <td>Rural Additions</td> <td><input type="text" value="Yes"/></td> <td></td> <td></td> </tr> </table>			Pipe & Entrance	<input type="text" value="Yes"/>	Engineering & Survey	<input type="text" value="Yes"/>	Traffic Calming	<input type="text" value="Yes"/>	Traffic Services	<input type="text" value="Yes"/>	Rural Additions	<input type="text" value="Yes"/>																																													
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Rural Additions	<input type="text" value="Yes"/>																																																								

**Annual Costs (Nominal Dollars)**

	2009	2010	2011	2012	2013	2014
<b>MAINTENANCE</b>						
Direct Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Overhead Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Maintenance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>OPERATIONS</b>						
Direct Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
County-Wide Cost Centers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Overhead Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Operations</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>CONSTRUCTION</b>						
Numbered Project Costs	\$ 2,455,574	\$ 2,439,842	\$ 2,485,101	\$ 2,447,029	\$ 2,447,029	\$ 2,447,029
County-Wide Cost Centers	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000
<b>Total Construction</b>	<b>\$ 2,545,574</b>	<b>\$ 2,529,842</b>	<b>\$ 2,575,101</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>
<b>Total Annual Costs</b>	<b>\$ 2,545,574</b>	<b>\$ 2,529,842</b>	<b>\$ 2,575,101</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>

**Analysis Notes:**  
 1) Construction estimates for 2013 - 2015 assume no growth above 2012 levels from 2007 SSYP.

**Non-Recurring Costs (Nominal Dollars)      County-specific Information**

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Real Estate</td><td style="text-align: right;">\$ -</td></tr> <tr><td>Vehicles and Equipment</td><td style="text-align: right;">\$ 33,968</td></tr> <tr><td>Office Set-up</td><td style="text-align: right;">\$ 28,419</td></tr> <tr><td><b>Total Up Front Costs</b></td><td style="text-align: right;"><b>\$ 62,387</b></td></tr> </table>	Real Estate	\$ -	Vehicles and Equipment	\$ 33,968	Office Set-up	\$ 28,419	<b>Total Up Front Costs</b>	<b>\$ 62,387</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Average Annual Emergency Costs</td><td style="text-align: right;">\$ 867,087</td></tr> <tr><td>Percent of M&amp;O Outsourced</td><td style="text-align: right;">41%</td></tr> <tr><td>Percent of System "Federal Eligible"</td><td style="text-align: right;">11%</td></tr> </table>	Average Annual Emergency Costs	\$ 867,087	Percent of M&O Outsourced	41%	Percent of System "Federal Eligible"	11%
Real Estate	\$ -														
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<b>Total Up Front Costs</b>	<b>\$ 62,387</b>														
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# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Name of Run/File: JCC Construction Only  
 County: James City  
 Scope of Analysis: Construction Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facility Outputs
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**Staffing Inputs Page**

Percent Outsourced       The default FTE requirement for maintenance/operations staff reflects VDOT's average historical in-house/outsourcing mix for the Hampton Roads District.

Position Description	Recommended Number of FTEs	Check to Manually Set FTE Needs	Input Revised FTE Need	Revised FTE Needs	Adjustments to Hiring Needs:	
					# of FTEs from Existing Co. Staff	# of FTEs Outsourced
<b>General Management</b>						
Transportation Director	<input style="width: 40px;" type="text" value="1"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="-"/>
Administrative Support	<input style="width: 40px;" type="text" value="1"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Chief Engineer (optional)	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Contracts Administrator	<input style="width: 40px;" type="text" value="1"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="-"/>
Business Administrator	<input style="width: 40px;" type="text" value="1"/>	<input checked="" type="checkbox"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Human Resources Specialist	<input style="width: 40px;" type="text" value="-"/>	<input checked="" type="checkbox"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text" value="Budget Analyst"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="1"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
<b>Maintenance Staff</b>						
Assistant Director - Maintenance/Operations	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Maintenance Superintendent	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Assistant Maintenance Superintendent	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Maintenance Supervisor	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Maintenance Crew Members	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Fiscal Assistant/Time Keeper	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Equipment Shop Staff	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
<b>Operations (Land Development) Staff</b>						
Traffic Engineer	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Jr. Traffic Engineer/Tech	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Permitting Specialist	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Combined Traffic Eng./Permit Spec.	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
<b>Core Construction Staff</b>						
Assistant Director - Construction	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Engineering Techs/Designer	<input style="width: 40px;" type="text" value="2"/>	<input checked="" type="checkbox"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Construction Project Manager	<input style="width: 40px;" type="text" value="2"/>	<input checked="" type="checkbox"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
<b>User-defined Construction Staff</b>						
Surveyor	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
ROW Specialist	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Utilities Specialist	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Environmental	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Materials & Testing Specialist	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Traffic Engineer	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Senior Inspector	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Junior Inspector	<input style="width: 40px;" type="text" value="-"/>	<input type="checkbox"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
Other <input style="width: 100px;" type="text"/>	<input style="width: 40px;" type="text" value="-"/>		<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>	<input style="width: 40px;" type="text" value="-"/>
<b>Total Staffing</b>	<input style="width: 40px;" type="text" value="8"/>			<input style="width: 40px;" type="text" value="4"/>	<input style="width: 40px;" type="text" value="2"/>	<input style="width: 40px;" type="text" value="-"/>

\*Sum of input county and outsourced FTEs can not exceed FTE requirement/Input number of FTEs

# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption v1.0

Version: JCC Construction Only

County: James City

Scope of Analysis: Construction Only

Devolution Start Date: FY 2009

Date of Analysis: 2/28/2007

Today's Date: 3/5/2007

User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Equipment Outputs	Facilities Outputs
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### Staffing Needs Forecast

Position Description	FTEs Requirements	FTEs Filled w/ Existing Co. Staff	Outsourced FTEs	Additional Staffing Needs
<b>General Management</b>				
Transportation Director	1	1	-	-
Administrative Support	1	-	-	1
Chief Engineer (optional)	-	-	-	-
Contracts Administrator	1	1	-	-
Business Administrator	-	-	-	-
Human Resources Specialist	-	-	-	-
Other <input type="text" value="Budget Analyst"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Maintenance Staff</b>				
Assistant Director - Maintenance/Operations	-	-	-	-
Maintenance Superintendent	-	-	-	-
Assistant Maintenance Superintendent	-	-	-	-
Maintenance Supervisor	-	-	-	-
Maintenance Crew Members	-	-	-	-
Fiscal Assistant/Time Keeper	-	-	-	-
Equipment Shop Staff	-	-	-	-
Other <input type="text" value="0"/>	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Operations (Land Development) Staff</b>				
Traffic Engineer (ops)	-	-	-	-
Jr. Traffic Engineer/Tech	-	-	-	-
Permitting Specialist	-	-	-	-
Combined Traffic Eng./Permit Spec.	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Core Construction Staff</b>				
Assistant Director - Construction	-	-	-	-
Engineering Techs/Designer	-	-	-	-
Construction Project Manager	-	-	-	-
<b>User-defined Construction Staff</b>				
Surveyor	-	-	-	-
ROW Specialist	-	-	-	-
Utilities Specialist	-	-	-	-
Environmental	-	-	-	-
Materials & Testing Specialist	-	-	-	-
Traffic Engineer	-	-	-	-
Senior Inspector	-	-	-	-
Junior Inspector	-	-	-	-
Other <input type="text"/>	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Total FTEs</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>2</b>

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Construction Only  
 County: James City  
 Scope of Analysis: Construction Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007 Today's Date: 3/5/2007 User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facilities Outputs
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Equipment Inputs												
(Default Costs in 2005 \$\$/Enter All New Costs in 2005 \$)												
	Default Need	Adjust Need	Need	Default Cost/Item	Adjust Cost	Input New Cost	Default Need	Adjust Need	Input Need	Default Cost/Item	Adjust Cost	Input New Cost
<b>Recommended M&amp;O Equipment</b>						<b>Optional M&amp;O Equipment</b>						
Air Compressors	-	<input type="checkbox"/>		\$ 23,600	<input type="checkbox"/>		Augers	-	<input type="checkbox"/>		\$ 500	<input type="checkbox"/>
Arrow Signs - Trailer Mounted	-	<input type="checkbox"/>		\$ 6,000	<input type="checkbox"/>		Equipment	-	<input type="checkbox"/>		\$ 7,400	<input type="checkbox"/>
Asphalt Haulers	-	<input type="checkbox"/>		\$ 16,800	<input type="checkbox"/>		Concrete Vibrators	-	<input type="checkbox"/>		\$ 1,500	<input type="checkbox"/>
Asphalt Kettles	-	<input type="checkbox"/>		\$ 9,000	<input type="checkbox"/>		Lights - Portable Work	-	<input type="checkbox"/>		\$ 12,200	<input type="checkbox"/>
Backhoes w/ Attachments	-	<input type="checkbox"/>		\$ 108,425	<input type="checkbox"/>		Loaders - Other	-	<input type="checkbox"/>		\$ 138,183	<input type="checkbox"/>
Brooms - Truck Attachment	-	<input type="checkbox"/>		\$ 3,055	<input type="checkbox"/>		Post Drivers & Pullers	-	<input type="checkbox"/>		\$ 1,125	<input type="checkbox"/>
Brush Chippers	-	<input type="checkbox"/>		\$ 21,050	<input type="checkbox"/>		Rollers - Other	-	<input type="checkbox"/>		\$ 59,733	<input type="checkbox"/>
Compactors	-	<input type="checkbox"/>		\$ 1,365	<input type="checkbox"/>		Rotary Tillers	-	<input type="checkbox"/>		\$ 3,300	<input type="checkbox"/>
Concrete Mixers & Mortar Mixers	-	<input type="checkbox"/>		\$ 1,470	<input type="checkbox"/>		Sign Cleaners	-	<input type="checkbox"/>		\$ 800	<input type="checkbox"/>
Ditching Trucks	-	<input type="checkbox"/>		\$ 255,700	<input type="checkbox"/>		Snow Blowers - Loader-Mounted	-	<input type="checkbox"/>		\$ 76,000	<input type="checkbox"/>
Dump Trucks - Large	-	<input type="checkbox"/>		\$ 104,350	<input type="checkbox"/>		Sprayers - Seed and Fertilizer	-	<input type="checkbox"/>		\$ 82,233	<input type="checkbox"/>
Dump Trucks - Standard	-	<input type="checkbox"/>		\$ 78,975	<input type="checkbox"/>		SUVs - Maintenance	-	<input type="checkbox"/>		\$ 21,800	<input type="checkbox"/>
Dump Trucks - 1 Ton	-	<input type="checkbox"/>		\$ 36,712	<input type="checkbox"/>		Trenchers	-	<input type="checkbox"/>		\$ 48,800	<input type="checkbox"/>
Excavators	-	<input type="checkbox"/>		\$ 193,833	<input type="checkbox"/>		Welders	-	<input type="checkbox"/>		\$ 3,500	<input type="checkbox"/>
Generators	-	<input type="checkbox"/>		\$ 5,300	<input type="checkbox"/>		<b>Construction Equipment</b>					
Graders	-	<input type="checkbox"/>		\$ 128,333	<input type="checkbox"/>		(Construction)	1	<input type="checkbox"/>		\$ 30,180	<input type="checkbox"/>
Loaders - Large	-	<input type="checkbox"/>		\$ 100,100	<input type="checkbox"/>		<b>Office Equipment</b>					
Loaders - Small (Bobcat)	-	<input type="checkbox"/>		\$ 38,200	<input type="checkbox"/>		Computers	4	<input type="checkbox"/>		\$ 2,000	<input type="checkbox"/>
Mowers - Small Riding	-	<input type="checkbox"/>		\$ 5,467	<input type="checkbox"/>		Telephones/Telephone System	5	<input type="checkbox"/>		\$ 250	<input type="checkbox"/>
Mowers - Tractor Attachments	-	<input type="checkbox"/>		\$ 63,200	<input type="checkbox"/>		Copier/Printer/etc.	1	<input type="checkbox"/>		\$ 5,000	<input type="checkbox"/>
Mowers - Walk Behind	-	<input type="checkbox"/>		\$ 733	<input type="checkbox"/>		Desks/Chairs/etc.	4	<input type="checkbox"/>		\$ 1,500	<input type="checkbox"/>
Pavement Breakers	-	<input type="checkbox"/>		\$ 460	<input type="checkbox"/>		Miscellaneous	1	<input type="checkbox"/>		\$ 5,000	<input type="checkbox"/>
Pavers/Patchers	-	<input type="checkbox"/>		\$ 92,200	<input type="checkbox"/>		<b>Additional Equipment/Supplies</b>					
Pickup Trucks (Maintenance)	-	<input type="checkbox"/>		\$ 30,180	<input type="checkbox"/>					# of Items	Cost/Item	
Pickup Trucks (Operations)	-	<input type="checkbox"/>		\$ 30,180	<input type="checkbox"/>					-	\$ -	
Rollers - 4 Ton 6 Ton Tandem	-	<input type="checkbox"/>		\$ 45,900	<input type="checkbox"/>					-	\$ -	
Snowplows	-	<input type="checkbox"/>		\$ 3,210	<input type="checkbox"/>					-	\$ -	
Sprayers - Chemical	-	<input type="checkbox"/>		\$ 26,550	<input type="checkbox"/>					-	\$ -	
Spreaders - Abrasive	-	<input type="checkbox"/>		\$ 6,090	<input type="checkbox"/>					-	\$ -	
Steam Cleaners	-	<input type="checkbox"/>		\$ 3,400	<input type="checkbox"/>					-	\$ -	
Sweepers	-	<input type="checkbox"/>		\$ 94,566	<input type="checkbox"/>					-	\$ -	
Tanks - Water Sprinkler	-	<input type="checkbox"/>		\$ 400	<input type="checkbox"/>					-	\$ -	
Tractors w/ Misc. Attachments	-	<input type="checkbox"/>		\$ 38,400	<input type="checkbox"/>					-	\$ -	
Trailers - Other	-	<input type="checkbox"/>		\$ 36,400	<input type="checkbox"/>					-	\$ -	
Trucks - Bridge	-	<input type="checkbox"/>		\$ 106,525	<input type="checkbox"/>					-	\$ -	
Trucks - Bucket	-	<input type="checkbox"/>		\$ 118,191	<input type="checkbox"/>					-	\$ -	
Trucks - Crash Cushion Vehicle	-	<input type="checkbox"/>		\$ 70,200	<input type="checkbox"/>					-	\$ -	
Trucks - Utility Body & Crane	-	<input type="checkbox"/>		\$ 47,600	<input type="checkbox"/>					-	\$ -	
Vac. All Trucks	-	<input type="checkbox"/>		\$ 182,400	<input type="checkbox"/>					-	\$ -	
VMS - Trailer Mounted	-	<input type="checkbox"/>		\$ 15,300	<input type="checkbox"/>					-	\$ -	
Miscellaneous	-	<input type="checkbox"/>		\$ 20,000	<input type="checkbox"/>					-	\$ -	

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Construction Only  
 County: James City  
 Scope of Analysis: Construction Only  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007 Today's Date: 3/5/2007 User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Facilities Outputs
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## Equipment Requirements Forecast

**Costs** \$ 62,387

### Itemized Equipment List

	Number of Pieces	Cost Per Piece	Total Cost		Number of Pieces	Cost Per Piece	Total Cost
<b>Field Equipment</b>				<b>Optional Field Equipment</b>			
Air Compressors	0	\$ 26,562	\$ -	Augers	0	\$ 563	\$ -
Arrow Signs - Trailer	0	\$ 6,753	\$ -	Communications/Intercom	0	\$ 8,329	\$ -
Asphalt Haulers	0	\$ 18,909	\$ -	Concrete Vibrators	0	\$ 1,688	\$ -
Asphalt Kettles	0	\$ 10,130	\$ -	Lights - Portable Work	0	\$ 13,731	\$ -
Backhoes w/ Attachments	0	\$ 122,033	\$ -	Loaders - Other	0	\$ 155,526	\$ -
Brooms - Truck Attachment	0	\$ 3,438	\$ -	Post Drivers & Pullers	0	\$ 1,266	\$ -
Brush Chippers	0	\$ 23,692	\$ -	Rollers - Other	0	\$ 67,230	\$ -
Compactors	0	\$ 1,536	\$ -	Rotary Tillers	0	\$ 3,714	\$ -
Concrete Mixers & Mortar	0	\$ 1,654	\$ -	Sign Cleaners	0	\$ 900	\$ -
Ditching Trucks	0	\$ 287,793	\$ -	Snow Blowers - Loader-Mounted	0	\$ 85,539	\$ -
Dump Trucks - Large	0	\$ 117,447	\$ -	Sprayers - Seed and Fertilizer	0	\$ 92,554	\$ -
Dump Trucks - Standard	0	\$ 88,887	\$ -	SUVs - Maintenance	0	\$ 24,536	\$ -
Dump Trucks - 1 Ton	0	\$ 41,320	\$ -	Trenchers	0	\$ 54,925	\$ -
Excavators	0	\$ 218,161	\$ -	Welders - Small	0	\$ 3,939	\$ -
Generators	0	\$ 5,965	\$ -				
Graders	0	\$ 144,440	\$ -	<b>Construction Equipment</b>			
Loaders - Large	0	\$ 112,663	\$ -	Pickup Truck	1	\$ 33,968	\$ 33,968
Loaders - Small (Bobcat)	0	\$ 42,994	\$ -				
Mowers - Small Riding	0	\$ 6,153	\$ -	<b>Office Equipment</b>			
Mowers - Tractor	0	\$ 71,132	\$ -	Computers	4	\$ 2,251	\$ 9,004
Mowers - Walk Behind	0	\$ 825	\$ -	Telephones/Telephone System	5	\$ 281	\$ 1,407
Pavement Breakers	0	\$ 518	\$ -	Copier/printer/etc.	1	\$ 5,628	\$ 5,628
Pavers/Patchers	0	\$ 103,772	\$ -	Desks/Chairs/etc.	4	\$ 1,688	\$ 6,753
Pickup Trucks (Maintenance)	0	\$ 33,968	\$ -	Misc.	1	\$ 5,628	\$ 5,628
Pickup Trucks (Operations)	0	\$ 33,968	\$ -				
Rollers - 4 Ton 6 Ton	0	\$ 51,661	\$ -	<b>Additional Equipment/Supplies</b>			
Snowplows	0	\$ 3,613	\$ -		-	\$ -	\$ -
Sprayers - Chemical	0	\$ 29,882	\$ -		-	\$ -	\$ -
Spreaders - Abrasive	0	\$ 6,854	\$ -		-	\$ -	\$ -
Steam Cleaners	0	\$ 3,827	\$ -		-	\$ -	\$ -
Sweepers	0	\$ 106,435	\$ -		-	\$ -	\$ -
Tanks - Water Sprinkler	0	\$ 450	\$ -		-	\$ -	\$ -
Tractors w/ Misc.	0	\$ 43,220	\$ -		-	\$ -	\$ -
Trailers - Other	0	\$ 40,969	\$ -		-	\$ -	\$ -
Trucks - Bridge	0	\$ 119,895	\$ -		-	\$ -	\$ -
Trucks - Bucket	0	\$ 133,025	\$ -		-	\$ -	\$ -
Trucks - Crash Cushion	0	\$ 79,011	\$ -		-	\$ -	\$ -
Trucks - Utility Body & Crane	0	\$ 53,574	\$ -		-	\$ -	\$ -
Vac. All Trucks	0	\$ 205,293	\$ -		-	\$ -	\$ -
VMS - Trailer Mounted	0	\$ 17,220	\$ -		-	\$ -	\$ -
Miscellaneous	0	\$ 22,510	\$ -		-	\$ -	\$ -

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Construction Only  
 County: James City  
 Scope of Analysis: Construction Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 3/27/2007      Today's Date: 3/27/2007      User: Craig Secret

Intro Page	General Inputs	Staffing Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facilities Outputs
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## Facilities Inputs

**Part I: Maintenance/Operations Facilities**

**NO MAINTENANCE/OPERATIONS REQUIRED FOR CONSTRUCTION ONLY SCENARIOS**

**Select Area Headquarters (AHQ) Driver**

Default Number of Area HQs

**Number of AHQs**

**AHQ Build-out Requirement\***

Assume All AHQs Need Build-out

\*Note: counties should consider the availability of surplus VDOT AHQs.

Build-out Costs	Default # of Elements	Adjust Need	Input Need	Default Cost Per Area HQ (2005 \$)	Change Cost Basis	Input New Costs
Land Cost (9 acre lot)	<input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ <input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yard Build-out Cost	<input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ <input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buildings Cost	<input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ <input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chemical Facilities	<input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ <input type="text" value="-"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="text" value=""/>	<input type="checkbox"/>	<input type="text" value="-"/>	<input type="text" value=""/>	<input type="checkbox"/>	\$ <input type="text" value="-"/>

Input cost basis component cost changes in 2005 \$.

**Part II: Construction Facilities (Office Space)**

**Office Space Options**       **Select Office Space Driver**       **Number of sq ft Required**

**Office Space Cost\***       **Default Cost Per sq ft**

\*Note: enter costs in 2005 dollars; Office space input only applies if purchasing/building office space.

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Construction Only  
 County: James City  
 Scope of Analysis: Construction Only  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs
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## Non-recurring Facilities Cost Estimate

Maintenance Yard Costs	Cost/Area HQ	Total Cost	Office Space Requirements
Land	\$ <input type="text" value="-"/>	\$ <input type="text" value="-"/>	Number of sq ft <input type="text" value=""/>
Yard Build-out	\$ <input type="text" value="-"/>	\$ <input type="text" value="-"/>	Office Space Cost <input type="text" value="\$ -"/>
Building Cost	\$ <input type="text" value="-"/>	\$ <input type="text" value="-"/>	
Chemical Storage	\$ <input type="text" value="-"/>	\$ <input type="text" value="-"/>	
Other	\$ <input type="text" value=""/>	\$ <input type="text" value="-"/>	
<b>Total Costs</b>	<b>\$ <input type="text" value="-"/></b>	<b>\$ <input type="text" value="-"/></b>	

## Feasibility Model for Secondary System Assumption by Virginia Counties®

User

File Name

Run Date

**General Instructions**

1. Enter your name, file name, and analysis date in the yellow boxes on this page
2. If needed, click the "Reset Model" box to restore model defaults (note: all inputs will be lost if file is not saved first)
3. Click on the "Start Analysis" button to begin using the model
4. Select options using the various drop down menus and check boxes
5. Figures in white boxes are generated by the model and cannot be adjusted
6. Areas where user input is required or an option are identified by yellow boxes
7. Place your cursor over red triangles to receive additional information or guidance
8. Use the arrow buttons at the bottom of each page or the quick links boxes to navigate the model
9. All pages have been preformatted for printing, select print from you tool menu and print the active sheet
10. Save files under a new name if you wish to save the results

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**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maint. & Const.  
 County: James City  
 Scope of Analysis Maintenance and Construction  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secrest

### General Inputs

**Baseline Considerations**

<b>Select County</b> Isle of Wight <b>James City</b> King & Queen King George King William	<b>Select Devolution Option</b> None Maintenance Only Construction Only <b>Maintenance and Construction</b> Maintenance, Construction, and Operations	<b>Select Start Year</b> FY 2007 FY 2008 <b>FY 2009</b> FY 2010	<b>Inflation Rate</b> Default Values
---	--	---	---

**Overhead Factors**  
 Use Default Overhead Multipliers

**System Growth (optional)**  
 Input Future System Growth

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Additional Lane Miles	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Additional Structures	0	0	0	0	0	0	0	0	0	0

Enter number of lane miles and bridges/structures added each year.

**Maintenance and Operations Program Options**

**Maintenance & Operations Areas**

Pipes & Drains	Use Default Drivers
Roadside	Use Default Drivers
Traffic Devices	Use Default Drivers
Pavement	Use Default Drivers
Structures	Use Default Drivers
Special Facilities	Use Default Drivers
Snow Removal	Use Default Drivers
Operations	Use Default Drivers

**Construction Program Options**

**Additional Construction (Optional)**  
 Input Additional Projects

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Project Costs	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600
Number of Projects	0	0	3	3	3	3	3	3	3

Enter nominal dollar value (\$000s) AND number of additional construction projects.

**Select County-wide Construction Functions to Assu\*** \*Note: user must select all functions if selecting maintenance, construction, and operations option.

Pipe & Entrance	<input checked="" type="checkbox"/>	Engineering & Survey	<input checked="" type="checkbox"/>
Traffic Calming	<input checked="" type="checkbox"/>	Traffic Services	<input checked="" type="checkbox"/>
Rural Additions	<input checked="" type="checkbox"/>		

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version JCC Maint. & Const.  
 County: James City  
 Scope of Analysis: Maintenance and Construction  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Staffing Outputs	Equipment Outputs	Facility Outputs
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## Program Cost Estimates

### Assumptions Summary

<b>Out-year Inflation Rate</b> <input style="width: 50px;" type="text" value="3%"/>		<b>M&amp;O Program Service Options</b> Pipes & Drains Roadside Traffic Devices Pavement Structures Special Facilities Snow Removal Operations	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> <tr><td>Current VDOT Performance</td></tr> </table>	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance																																															
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<b>Overhead Rate/Amount</b> Maintenance <input style="width: 50px;" type="text" value="17.6%"/> Operations <input style="width: 50px;" type="text" value="17.6%"/>	<b>Rate</b> <input style="width: 50px;" type="text" value="17.6%"/> <input style="width: 50px;" type="text" value="17.6%"/>																																																									
<b>System/Construction Assumptions</b> System Growth - Lane Miles System Growth - Bridges & Structures Additional Construction Project Costs (\$000's) Number of Additional Projects	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> </tr> </thead> <tbody> <tr> <td>System Growth - Lane Miles</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>System Growth - Bridges &amp; Structures</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Additional Construction Project Costs (\$000's)</td> <td>N/A</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 1,150</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> </tr> <tr> <td>Number of Additional Projects</td> <td>N/A</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> </tr> </tbody> </table>		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	System Growth - Lane Miles	6	6	6	6	6	6	6	6	6	6	System Growth - Bridges & Structures	-	-	-	-	-	-	-	-	-	-	Additional Construction Project Costs (\$000's)	N/A	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	Number of Additional Projects	N/A	\$ -	\$ -	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015																																																
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Number of Additional Projects	N/A	\$ -	\$ -	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3																																																
<b>County-wide Construction Cost Center Functions Assumed</b> Pipe & Entrance <input style="width: 50px;" type="text" value="Yes"/> Traffic Calming <input style="width: 50px;" type="text" value="Yes"/> Rural Additions <input style="width: 50px;" type="text" value="Yes"/>	<b>Engineering &amp; Survey</b> <input style="width: 50px;" type="text" value="Yes"/> <b>Traffic Services</b> <input style="width: 50px;" type="text" value="Yes"/>	(Optional under Maintenance Only and Maintenance & Construction options)																																																								

### Annual Costs (Nominal Dollars)

	2009	2010	2011	2012	2013	2014
<b>MAINTENANCE</b>						
Direct Costs	\$ 1,917,206	\$ 1,993,979	\$ 2,073,632	\$ 2,156,271	\$ 2,242,001	\$ 2,330,934
Overhead Costs	\$ 337,428	\$ 350,940	\$ 364,959	\$ 379,504	\$ 394,592	\$ 410,244
<b>Total Maintenance</b>	<b>\$ 2,254,634</b>	<b>\$ 2,344,919</b>	<b>\$ 2,438,592</b>	<b>\$ 2,535,774</b>	<b>\$ 2,636,593</b>	<b>\$ 2,741,179</b>
<b>OPERATIONS</b>						
Direct Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
County-Wide Cost Centers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Overhead Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Operations</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>CONSTRUCTION</b>						
Numbered Project Costs	\$ 2,455,574	\$ 2,439,842	\$ 2,485,101	\$ 2,447,029	\$ 2,447,029	\$ 2,447,029
County-Wide Cost Centers	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000
<b>Total Construction</b>	<b>\$ 2,545,574</b>	<b>\$ 2,529,842</b>	<b>\$ 2,575,101</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>
<b>Total Annual Costs</b>	<b>\$ 4,800,208</b>	<b>\$ 4,874,761</b>	<b>\$ 5,013,693</b>	<b>\$ 5,072,803</b>	<b>\$ 5,173,622</b>	<b>\$ 5,278,208</b>

**Analysis Notes:**  
 1) Construction estimates for 2013 - 2015 assume no growth above 2012 levels from 2007 SSYP.

### Non-Recurring Costs (Nominal Dollars)

Real Estate	\$ 3,325,879
Vehicles and Equipment	\$ 1,637,001
Office Set-up	\$ 50,367
<b>Total Up Front Costs</b>	<b>\$ 5,013,247</b>

### County-specific Information

Average Annual Emergency Costs	\$ 867,087
Percent of M&O Outsourced	41%
Percent of System "Federal Eligible"	11%



# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption v1.0

Name of Run/File: JCC Maint. & Const.

County: James City

Scope of Analysis: Maintenance and Construction

Devolution Start Date: FY 2009

Date of Analysis: 2/28/2007

Today's Date: 3/5/2007

User: craig secret

Intro Page | General Inputs | Facilities Inputs | Equipment Inputs | Cost Outputs | Staffing Outputs | Equipment Outputs | Facility Outputs

### Staffing Inputs Page

Percent Outsourced

The default FTE requirement for maintenance/operations staff reflects VDOT's average historical in-house/outsourcing mix for the [Hampton Roads District](#).

Position Description	Recommended Number of FTEs	Check to Manually Set FTE Needs	Input Revised FTE Need	Revised FTE Needs	Adjustments to Hiring Needs:	
					# of FTEs from Existing Co. Staff	# of FTEs Outsourced
<b>General Management</b>						
Transportation Director	1	<input type="checkbox"/>		1	1	-
Administrative Support	1	<input type="checkbox"/>		1	-	-
Chief Engineer (optional)	-	<input type="checkbox"/>		-	-	-
Contracts Administrator	1	<input type="checkbox"/>		1	1	-
Business Administrator	1	<input checked="" type="checkbox"/>	-	-	-	-
Human Resources Specialist	1	<input checked="" type="checkbox"/>	-	-	-	-
Other <span style="border: 1px solid black; padding: 1px;">Budget Analyst</span>	-		1	1	-	-
Other <span style="border: 1px solid black; padding: 1px;"></span>	-		-	-	-	-
<b>Maintenance Staff</b>						
Assistant Director - Maintenance/Operations	1	<input checked="" type="checkbox"/>	1	1	-	-
Maintenance Superintendent	1	<input type="checkbox"/>		1	-	-
Assistant Maintenance Superintendent	-	<input type="checkbox"/>		-	-	-
Maintenance Supervisor	1	<input checked="" type="checkbox"/>	-	-	-	-
Maintenance Crew Members	9	<input type="checkbox"/>		9	-	-
Fiscal Assistant/Time Keeper	1	<input checked="" type="checkbox"/>	-	-	-	-
Equipment Shop Staff	3	<input checked="" type="checkbox"/>	4	4	-	-
Other <span style="border: 1px solid black; padding: 1px;">Equipment Shop Foreman</span>	-		1	1	-	-
Other <span style="border: 1px solid black; padding: 1px;"></span>	-		-	-	-	-
<b>Operations (Land Development) Staff</b>						
Traffic Engineer	-	<input type="checkbox"/>		-	-	-
Jr. Traffic Engineer/Tech	-	<input type="checkbox"/>		-	-	-
Permitting Specialist	-	<input type="checkbox"/>		-	-	-
Combined Traffic Eng./Permit Spec.	-	<input type="checkbox"/>		-	-	-
Other <span style="border: 1px solid black; padding: 1px;"></span>	-		-	-	-	-
<b>Core Construction Staff</b>						
Assistant Director - Construction	1	<input checked="" type="checkbox"/>	-	-	-	-
Engineering Techs/Designer	1	<input checked="" type="checkbox"/>	-	-	-	-
Construction Project Manager	1	<input checked="" type="checkbox"/>	-	-	-	-
<b>User-defined Construction Staff</b>						
Surveyor	-	<input type="checkbox"/>		-	-	-
ROW Specialist	-	<input type="checkbox"/>		-	-	-
Utilities Specialist	-	<input type="checkbox"/>		-	-	-
Environmental	-	<input type="checkbox"/>		-	-	-
Materials & Testing Specialist	-	<input type="checkbox"/>		-	-	-
Traffic Engineer	-	<input type="checkbox"/>		-	-	-
Senior Inspector	-	<input type="checkbox"/>		-	-	-
Junior Inspector	-	<input type="checkbox"/>		-	-	-
Other <span style="border: 1px solid black; padding: 1px;"></span>	-		-	-	-	-
Other <span style="border: 1px solid black; padding: 1px;"></span>	-		-	-	-	-
<b>Total Staffing</b>	<b>24</b>			<b>20</b>	<b>2</b>	<b>-</b>

\*Sum of input county and outsourced FTEs can not exceed FTE requirement/Input number of FTEs

# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption v1.0

Version: JCC Maint. & Const.

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Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Equipment Outputs	Facilities Outputs
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### Staffing Needs Forecast

Position Description	FTEs Requirements	FTEs Filled w/ Existing Co. Staff	Outsourced FTEs	Additional Staffing Needs
<b>General Management</b>				
Transportation Director	1	1	-	-
Administrative Support	1	-	-	1
Chief Engineer (optional)	-	-	-	-
Contracts Administrator	1	1	-	-
Business Administrator	-	-	-	-
Human Resources Specialist	-	-	-	-
Other <input type="text" value="Budget Analyst"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Maintenance Staff</b>				
Assistant Director - Maintenance/Operations	1	-	-	1
Maintenance Superintendent	1	-	-	1
Assistant Maintenance Superintendent	-	-	-	-
Maintenance Supervisor	-	-	-	-
Maintenance Crew Members	9	-	-	9
Fiscal Assistant/Time Keeper	-	-	-	-
Equipment Shop Staff	4	-	-	4
Other <input type="text" value="Equipment Shop Foreman"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Operations (Land Development) Staff</b>				
Traffic Engineer (ops)	-	-	-	-
Jr. Traffic Engineer/Tech	-	-	-	-
Permitting Specialist	-	-	-	-
Combined Traffic Eng./Permit Spec.	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Core Construction Staff</b>				
Assistant Director - Construction	-	-	-	-
Engineering Techs/Designer	-	-	-	-
Construction Project Manager	-	-	-	-
<b>User-defined Construction Staff</b>				
Surveyor	-	-	-	-
ROW Specialist	-	-	-	-
Utilities Specialist	-	-	-	-
Environmental	-	-	-	-
Materials & Testing Specialist	-	-	-	-
Traffic Engineer	-	-	-	-
Senior Inspector	-	-	-	-
Junior Inspector	-	-	-	-
Other <input type="text"/>	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Total FTEs</b>	<b>20</b>	<b>2</b>	<b>-</b>	<b>18</b>

# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption v1.0

Version: JCC Maint. & Const.  
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Equipment Outputs
Facilities Outputs

### Equipment Inputs

(Default Costs in 2005 \$\$/Enter All New Costs in 2005 \$\$)

	Default	Adjust	Input	Default	Adjust	Input	Default	Adjust	Input	Default	Adjust	Input
	Need	Need	Need	Cost/Item	Cost	New Cost		Need	Need	Need	Cost/Item	Cost
<b>Recommended M&amp;O Equipment</b>												
Air Compressors	1	<input checked="" type="checkbox"/>		\$ 23,600	<input type="checkbox"/>							
Arrow Signs - Trailer Mounted	2	<input type="checkbox"/>		\$ 6,000	<input type="checkbox"/>							
Asphalt Haulers	1	<input checked="" type="checkbox"/>		\$ 16,800	<input type="checkbox"/>							
Asphalt Kettles	1	<input checked="" type="checkbox"/>		\$ 9,000	<input type="checkbox"/>							
Backhoes w/ Attachments	1	<input type="checkbox"/>		\$ 108,425	<input type="checkbox"/>							
Brooms - Truck Attachment	1	<input checked="" type="checkbox"/>		\$ 3,055	<input type="checkbox"/>							
Brush Chippers	1	<input checked="" type="checkbox"/>		\$ 21,050	<input type="checkbox"/>							
Compactors	1	<input checked="" type="checkbox"/>		\$ 1,365	<input type="checkbox"/>							
Concrete Mixers & Mortar Mixers	1	<input checked="" type="checkbox"/>		\$ 1,470	<input type="checkbox"/>							
Ditching Trucks	1	<input checked="" type="checkbox"/>		\$ 255,700	<input type="checkbox"/>							
Dump Trucks - Large	1	<input type="checkbox"/>		\$ 104,350	<input type="checkbox"/>							
Dump Trucks - Standard	3	<input type="checkbox"/>		\$ 78,975	<input type="checkbox"/>							
Dump Trucks - 1 Ton	1	<input type="checkbox"/>		\$ 36,712	<input type="checkbox"/>							
Excavators	1	<input checked="" type="checkbox"/>		\$ 193,833	<input type="checkbox"/>							
Generators	2	<input checked="" type="checkbox"/>		\$ 5,300	<input type="checkbox"/>							
Graders	1	<input type="checkbox"/>		\$ 128,333	<input type="checkbox"/>							
Loaders - Large	1	<input checked="" type="checkbox"/>		\$ 100,100	<input type="checkbox"/>							
Loaders - Small (Bobcat)	1	<input checked="" type="checkbox"/>		\$ 38,200	<input type="checkbox"/>							
Mowers - Small Riding	1	<input checked="" type="checkbox"/>		\$ 5,467	<input type="checkbox"/>							
Mowers - Tractor Attachments	2	<input checked="" type="checkbox"/>	4	\$ 63,200	<input type="checkbox"/>							
Mowers - Walk Behind	1	<input checked="" type="checkbox"/>		\$ 733	<input type="checkbox"/>							
Pavement Breakers	1	<input checked="" type="checkbox"/>		\$ 460	<input type="checkbox"/>							
Pavers/Patchers	1	<input checked="" type="checkbox"/>		\$ 92,200	<input type="checkbox"/>							
Pickup Trucks (Maintenance)	3	<input type="checkbox"/>		\$ 30,180	<input type="checkbox"/>							
Pickup Trucks (Operations)	-	<input checked="" type="checkbox"/>		\$ 30,180	<input type="checkbox"/>							
Rollers - 4 Ton 6 Ton Tandem	1	<input checked="" type="checkbox"/>		\$ 45,900	<input type="checkbox"/>							
Snowplows	12	<input type="checkbox"/>		\$ 3,210	<input type="checkbox"/>							
Sprayers - Chemical	1	<input checked="" type="checkbox"/>		\$ 26,550	<input type="checkbox"/>							
Spreaders - Abrasive	12	<input checked="" type="checkbox"/>	6	\$ 6,090	<input type="checkbox"/>							
Steam Cleaners	1	<input checked="" type="checkbox"/>		\$ 3,400	<input type="checkbox"/>							
Sweepers	1	<input checked="" type="checkbox"/>		\$ 94,566	<input type="checkbox"/>							
Tanks - Water Sprinkler	1	<input checked="" type="checkbox"/>		\$ 400	<input type="checkbox"/>							
Tractors w/ Misc. Attachments	2	<input checked="" type="checkbox"/>	1	\$ 38,400	<input type="checkbox"/>							
Trailers - Other	1	<input checked="" type="checkbox"/>		\$ 36,400	<input type="checkbox"/>							
Trucks - Bridge	1	<input checked="" type="checkbox"/>		\$ 106,525	<input type="checkbox"/>							
Trucks - Bucket	1	<input checked="" type="checkbox"/>		\$ 118,191	<input type="checkbox"/>							
Trucks - Crash Cushion Vehicle	2	<input type="checkbox"/>		\$ 70,200	<input type="checkbox"/>							
Trucks - Utility Body & Crane	1	<input checked="" type="checkbox"/>		\$ 47,600	<input type="checkbox"/>							
Vac. All Trucks	1	<input checked="" type="checkbox"/>		\$ 182,400	<input type="checkbox"/>							
VMS - Trailer Mounted	2	<input type="checkbox"/>		\$ 15,300	<input type="checkbox"/>							
Miscellaneous	1	<input checked="" type="checkbox"/>		\$ 20,000	<input type="checkbox"/>							
<b>Optional M&amp;O Equipment</b>												
Augers		<input type="checkbox"/>		\$ 500	<input type="checkbox"/>							
Equipment		<input type="checkbox"/>		\$ 7,400	<input type="checkbox"/>							
Concrete Vibrators		<input type="checkbox"/>		\$ 1,500	<input type="checkbox"/>							
Lights - Portable Work		<input type="checkbox"/>		\$ 12,200	<input type="checkbox"/>							
Loaders - Other		<input type="checkbox"/>		\$ 138,183	<input type="checkbox"/>							
Post Drivers & Pullers		<input type="checkbox"/>		\$ 1,125	<input type="checkbox"/>							
Rollers - Other		<input type="checkbox"/>		\$ 59,733	<input type="checkbox"/>							
Rotary Tillers		<input type="checkbox"/>		\$ 3,300	<input type="checkbox"/>							
Sign Cleaners		<input type="checkbox"/>		\$ 800	<input type="checkbox"/>							
Snow Blowers - Loader-Mounted		<input type="checkbox"/>		\$ 76,000	<input type="checkbox"/>							
Sprayers - Seed and Fertilizer		<input type="checkbox"/>		\$ 82,233	<input type="checkbox"/>							
SUVs - Maintenance		<input type="checkbox"/>		\$ 21,800	<input type="checkbox"/>							
Trenchers		<input type="checkbox"/>		\$ 48,800	<input type="checkbox"/>							
Welders		<input type="checkbox"/>		\$ 3,500	<input type="checkbox"/>							
<b>Construction Equipment</b>												
(Construction)		<input type="checkbox"/>		\$ 30,180	<input type="checkbox"/>							
<b>Office Equipment</b>												
Computers	6	<input type="checkbox"/>		\$ 2,000	<input type="checkbox"/>							
Telephones/Telephone System	9	<input type="checkbox"/>		\$ 250	<input type="checkbox"/>							
Copier/Printer/etc.	2	<input type="checkbox"/>		\$ 5,000	<input type="checkbox"/>							
Desks/Chairs/etc.	7	<input type="checkbox"/>		\$ 1,500	<input type="checkbox"/>							
Miscellaneous	2	<input type="checkbox"/>		\$ 5,000	<input type="checkbox"/>							
<b>Additional Equipment/Supplies</b>												
Gradall		<input type="checkbox"/>		\$ 225,000	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
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		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							
		<input type="checkbox"/>		\$ -	<input type="checkbox"/>							

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maint. & Const.  
 County: James City  
 Scope of Analysis: Maintenance and Construction  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007    Today's Date: 3/5/2007    User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Facilities Outputs
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Equipment Requirements Forecast

Costs	<b>\$ 1,687,368</b>
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### Itemized Equipment List

Field Equipment	Number of Pieces	Cost Per Piece	Total Cost	Optional Field Equipment	Number of Pieces	Cost Per Piece	Total Cost
Air Compressors	0	\$ 26,562	\$ -	Augers	0	\$ 563	\$ -
Arrow Signs - Trailer	2	\$ 6,753	\$ 13,506	Communications/Intercom	0	\$ 8,329	\$ -
Asphalt Haulers	0	\$ 18,909	\$ -	Concrete Vibrators	0	\$ 1,688	\$ -
Asphalt Kettles	0	\$ 10,130	\$ -	Lights - Portable Work	0	\$ 13,731	\$ -
Backhoes w/ Attachments	1	\$ 122,033	\$ 122,033	Loaders - Other	0	\$ 155,526	\$ -
Brooms - Truck Attachment	0	\$ 3,438	\$ -	Post Drivers & Pullers	0	\$ 1,266	\$ -
Brush Chippers	0	\$ 23,692	\$ -	Rollers - Other	0	\$ 67,230	\$ -
Compactors	0	\$ 1,536	\$ -	Rotary Tillers	0	\$ 3,714	\$ -
Concrete Mixers & Mortar	0	\$ 1,654	\$ -	Sign Cleaners	0	\$ 900	\$ -
Ditching Trucks	0	\$ 287,793	\$ -	Snow Blowers - Loader-Mounted	0	\$ 85,539	\$ -
Dump Trucks - Large	1	\$ 117,447	\$ 117,447	Sprayers - Seed and Fertilizer	0	\$ 92,554	\$ -
Dump Trucks - Standard	3	\$ 88,887	\$ 266,661	SUVs - Maintenance	0	\$ 24,536	\$ -
Dump Trucks - 1 Ton	1	\$ 41,320	\$ 41,320	Trenchers	0	\$ 54,925	\$ -
Excavators	0	\$ 218,161	\$ -	Welders - Small	0	\$ 3,939	\$ -
Generators	0	\$ 5,965	\$ -				
Graders	1	\$ 144,440	\$ 144,440	<b>Construction Equipment</b>			
Loaders - Large	0	\$ 112,663	\$ -	Pickup Truck	0	\$ 33,968	\$ -
Loaders - Small (Bobcat)	0	\$ 42,994	\$ -				
Mowers - Small Riding	0	\$ 6,153	\$ -	<b>Office Equipment</b>			
Mowers - Tractor	4	\$ 71,132	\$ 284,529	Computers	6	\$ 2,251	\$ 13,506
Mowers - Walk Behind	0	\$ 825	\$ -	Telephones/Telephone System	9	\$ 281	\$ 2,532
Pavement Breakers	0	\$ 518	\$ -	Copier/printer/etc.	2	\$ 5,628	\$ 11,255
Pavers/Patchers	0	\$ 103,772	\$ -	Desks/Chairs/etc.	7	\$ 1,688	\$ 11,818
Pickup Trucks (Maintenance)	3	\$ 33,968	\$ 101,904	Misc.	2	\$ 5,628	\$ 11,255
Pickup Trucks (Operations)	0	\$ 33,968	\$ -				
Rollers - 4 Ton 6 Ton	0	\$ 51,661	\$ -	<b>Additional Equipment/Supplies</b>			
Snowplows	12	\$ 3,613	\$ 43,355	Gradall	1	\$ 225,000	\$ 225,000
Sprayers - Chemical	0	\$ 29,882	\$ -		-	\$ -	\$ -
Spreaders - Abrasive	6	\$ 6,854	\$ 41,126		-	\$ -	\$ -
Steam Cleaners	0	\$ 3,827	\$ -		-	\$ -	\$ -
Sweepers	0	\$ 106,435	\$ -		-	\$ -	\$ -
Tanks - Water Sprinkler	0	\$ 450	\$ -		-	\$ -	\$ -
Tractors w/ Misc.	1	\$ 43,220	\$ 43,220		-	\$ -	\$ -
Trailers - Other	0	\$ 40,969	\$ -		-	\$ -	\$ -
Trucks - Bridge	0	\$ 119,895	\$ -		-	\$ -	\$ -
Trucks - Bucket	0	\$ 133,025	\$ -		-	\$ -	\$ -
Trucks - Crash Cushion	2	\$ 79,011	\$ 158,021		-	\$ -	\$ -
Trucks - Utility Body & Crane	0	\$ 53,574	\$ -		-	\$ -	\$ -
Vac. All Trucks	0	\$ 205,293	\$ -		-	\$ -	\$ -
VMS - Trailer Mounted	2	\$ 17,220	\$ 34,441		-	\$ -	\$ -
Miscellaneous	0	\$ 22,510	\$ -		-	\$ -	\$ -

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maint. & Const.  
 County: James City  
 Scope of Analysis: Maintenance and Construction  
 Devolution Start Date: FY 2009  
 Date of Analysis: 3/27/2007      Today's Date: 3/27/2007      User: Craig Secret

Intro Page	General Inputs	Staffing Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facilities Outputs
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## Facilities Inputs

**Part I: Maintenance/Operations Facilities**

**Select Area Headquarters (AHQ) Driver**  
 Default Number of Area HQs:       **Number of AHQs**:       **AHQ Build-out Requirement\***:

\*Note: counties should consider the availability of surplus VDOT AHQs.

Build-out Costs	Default # of Elements	Adjust Need	Input Need	Default Cost Per Area HQ (2005 \$)	Change Cost Basis	Input New Costs
Land Cost (9 acre lot)	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 810,000	<input type="checkbox"/>	
Yard Build-out Cost	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 1,200,000	<input type="checkbox"/>	
Buildings Cost	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 922,500	<input type="checkbox"/>	
Chemical Facilities	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 230,000	<input type="checkbox"/>	
Other	<input type="text" value=""/>	<input type="checkbox"/>	<input type="text" value="-"/>		<input type="checkbox"/>	\$ -

Input cost basis component cost changes in 2005 \$.

**Part II: Construction Facilities (Office Space)**

**Office Space Options**:       **Select Office Space Driver**:       **Number of sq ft Required**:

**Office Space Cost\***:       **Default Cost Per sq ft**:

\*Note: enter costs in 2005 dollars; Office space input only applies if purchasing/building office space.

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC Maint. & Const.  
 County: James City  
 Scope of Analysis: Maintenance and Construction  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs
------------	----------------	-----------------	-------------------	------------------	--------------	------------------	-------------------

## Non-recurring Facilities Cost Estimate

Maintenance Yard Costs	Cost/Area HQ	Total Cost	Office Space Requirements
Land	\$ 911,662	\$ 911,662	Number of sq ft: <input type="text" value="-"/>
Yard Build-out	\$ 1,350,611	\$ 1,350,611	Office Space Cost: <input type="text" value="\$ -"/>
Building Cost	\$ 804,739	\$ 804,739	
Chemical Storage	\$ 258,867	\$ 258,867	
Other	\$ -	\$ -	
<b>Total Costs</b>	<b>\$ 3,325,879</b>	<b>\$ 3,325,879</b>	

# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption by Virginia Counties®

Save Run

User

craig secrest

Start

Reset Model

File Name

JCC All Functions

Print All

Run Date

February 28, 2007

General Inputs
Staffing Inputs
Equipment Inputs
Facility Inputs
Cost Outputs
Staffing Outputs
Equipment Outputs
Facility Outputs

**General Instructions**

1. Enter your name, file name, and analysis date in the yellow boxes on this page
2. If needed, click the "Reset Model" box to restore model defaults (note: all inputs will be lost if file is not saved first)
3. Click on the "Start Analysis" button to begin using the model
4. Select options using the various drop down menus and check boxes
5. Figures in white boxes are generated by the model and cannot be adjusted
6. Areas where user input is required or an option are identified by yellow boxes
7. Place your cursor over red triangles to receive additional information or guidance
8. Use the arrow buttons at the bottom of each page or the quick links boxes to navigate the model
9. All pages have been preformatted for printing, select print from you tool menu and print the active sheet
10. Save files under a new name if you wish to save the results

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**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC All Functions  
 County: James City  
 Scope of Analysis Maintenance, Construction, and Operations  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secrest

Intro Page
Staffing Inputs
Facilities Inputs
Equipment Inputs
Cost Outputs
Staffing Outputs
Equipment Outputs
Facility Outputs

### General Inputs

**Baseline Considerations**

**Select County**

- Isle of Wight
- James City
- King & Queen
- King George
- King William

**Select Devolution Option**

- None
- Maintenance Only
- Construction Only
- Maintenance and Construction

**Select Start Year**

- FY 2007
- FY 2008
- FY 2009
- FY 2010

**Inflation Rate**

Default Values ▼

**Overhead Factors**

Use Default Overhead Multipliers ▼

**System Growth (optional)**

Input Future System Growth ▼

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Additional Lane Miles	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Additional Structures	0	0	0	0	0	0	0	0	0	0

Enter number of lane miles and bridges/structures added each year.

**Maintenance and Operations Program Options**

**Maintenance & Operations Areas**

- Pipes & Drains      Use Default Drivers ▼
- Roadside              Use Default Drivers ▼
- Traffic Devices      Use Default Drivers ▼
- Pavement              Use Default Drivers ▼
- Structures             Use Default Drivers ▼
- Special Facilities    Use Default Drivers ▼
- Snow Removal        Use Default Drivers ▼
- Operations            Use Default Drivers ▼

**Construction Program Options**

**Additional Construction (Optional)**

Input Additional Projects ▼

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Project Costs	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600
Number of Projects	0	0	3	3	3	3	3	3	3

Enter nominal dollar value (\$000s) AND number of additional construction projects.

**Select County-wide Construction Functions to Assume** \*Note: user must select all functions if selecting maintenance, construction, and operations option.

- Pipe & Entrance            Engineering & Survey
- Traffic Calming            Traffic Services
- Rural Additions

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version JCC All Functions  
 County: James City  
 Scope of Analysis: Maintenance, Construction, and Operations  
 Devolution Start Date FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Staffing Outputs	Equipment Outputs	Facility Outputs
------------	----------------	-----------------	-------------------	------------------	------------------	-------------------	------------------

## Program Cost Estimates

### Assumptions Summary

<b>Out-year Inflation Rate</b> <input style="width: 50px;" type="text" value="3%"/>	<b>M&amp;O Program Service Options</b> Pipes & Drains Roadside Traffic Devices Pavement Structures Special Facilities Snow Removal Operations	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> <tr><td style="text-align: center;">Current VDOT Performance</td></tr> </table>	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance	Current VDOT Performance																																															
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<b>Overhead Rate/Amount</b> Maintenance <input style="width: 50px;" type="text" value="17.6%"/> Operations <input style="width: 50px;" type="text" value="17.6%"/>																																																									
<b>System/Construction Assumptions</b>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> </tr> </thead> <tbody> <tr> <td>System Growth - Lane Miles</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> </tr> <tr> <td>System Growth - Bridges &amp; Structures</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Additional Construction Project Costs (\$000's)</td> <td>N/A</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 1,150</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> <td>\$ 1,600</td> </tr> <tr> <td>Number of Additional Projects</td> <td>N/A</td> <td>\$ -</td> <td>\$ -</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> <td>\$ 3</td> </tr> </tbody> </table>			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	System Growth - Lane Miles	6	6	6	6	6	6	6	6	6	6	System Growth - Bridges & Structures	-	-	-	-	-	-	-	-	-	-	Additional Construction Project Costs (\$000's)	N/A	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	Number of Additional Projects	N/A	\$ -	\$ -	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015																																															
System Growth - Lane Miles	6	6	6	6	6	6	6	6	6	6																																															
System Growth - Bridges & Structures	-	-	-	-	-	-	-	-	-	-																																															
Additional Construction Project Costs (\$000's)	N/A	\$ -	\$ -	\$ 1,150	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600	\$ 1,600																																															
Number of Additional Projects	N/A	\$ -	\$ -	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3																																															
<b>County-wide Construction Cost Center Functions Assumed</b>	(Assumption required under the Maintenance, Construction, and Operations option)																																																								
Pipe & Entrance <input style="width: 50px;" type="text" value="Yes"/> Traffic Calming <input style="width: 50px;" type="text" value="Yes"/> Rural Additions <input style="width: 50px;" type="text" value="Yes"/>	Engineering & Survey <input style="width: 50px;" type="text" value="Yes"/> Traffic Services <input style="width: 50px;" type="text" value="Yes"/>																																																								

### Annual Costs (Nominal Dollars)

	2009	2010	2011	2012	2013	2014
<b>MAINTENANCE</b>						
Direct Costs	\$ 1,917,206	\$ 1,993,979	\$ 2,073,632	\$ 2,156,271	\$ 2,242,001	\$ 2,330,934
Overhead Costs	\$ 337,428	\$ 350,940	\$ 364,959	\$ 379,504	\$ 394,592	\$ 410,244
<b>Total Maintenance</b>	<b>\$ 2,254,634</b>	<b>\$ 2,344,919</b>	<b>\$ 2,438,592</b>	<b>\$ 2,535,774</b>	<b>\$ 2,636,593</b>	<b>\$ 2,741,179</b>
<b>OPERATIONS</b>						
Direct Costs	\$ 413,774	\$ 426,507	\$ 439,633	\$ 453,162	\$ 467,107	\$ 481,481
County-Wide Cost Centers	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Overhead Costs	\$ 75,464	\$ 77,705	\$ 80,015	\$ 82,396	\$ 84,851	\$ 87,381
<b>Total Operations</b>	<b>\$ 504,238</b>	<b>\$ 519,213</b>	<b>\$ 534,648</b>	<b>\$ 550,558</b>	<b>\$ 566,957</b>	<b>\$ 583,861</b>
<b>CONSTRUCTION</b>						
Numbered Project Costs	\$ 2,455,574	\$ 2,439,842	\$ 2,485,101	\$ 2,447,029	\$ 2,447,029	\$ 2,447,029
County-Wide Cost Centers	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000
<b>Total Construction</b>	<b>\$ 2,545,574</b>	<b>\$ 2,529,842</b>	<b>\$ 2,575,101</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>	<b>\$ 2,537,029</b>
<b>Total Annual Costs</b>	<b>\$ 5,304,446</b>	<b>\$ 5,393,974</b>	<b>\$ 5,548,341</b>	<b>\$ 5,623,361</b>	<b>\$ 5,740,579</b>	<b>\$ 5,862,069</b>

- Analysis Notes:**
- 1) Construction estimates for 2013 - 2015 assume no growth above 2012 levels from 2007 SSYP.
  - 2) Operations Costs - a portion of these costs should be recovered through fees.

#### Non-Recurring Costs (Nominal Dollars)

Real Estate	\$ 3,325,879
Vehicles and Equipment	\$ 1,908,744
Office Set-up	\$ 65,561
<b>Total Up Front Costs</b>	<b>\$ 5,300,184</b>

#### County-specific Information

Average Annual Emergency Costs	\$ 867,087
Percent of M&O Outsourced	41%
Percent of System "Federal Eligible"	11%

# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Name of Run/File: JCC All Functions  
 County: James City  
 Scope of Analysis: Maintenance, Construction, and Operations  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facility Outputs
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**Staffing Inputs Page**

Percent Outsourced       The default FTE requirement for maintenance/operations staff reflects VDOT's average historical in-house/outsourcing mix for the Hampton Roads District.

Position Description	Recommended Number of FTEs	Check to Manually Set FTE Needs	Input Revised FTE Need	Revised FTE Needs	Adjustments to Hiring Needs:	
					# of FTEs from Existing Co. Staff	# of FTEs Outsourced
<b>General Management</b>						
Transportation Director	1	<input type="checkbox"/>		1	1	-
Administrative Support	1	<input type="checkbox"/>		1	-	-
Chief Engineer (optional)	-	<input type="checkbox"/>		-	-	-
Contracts Administrator	1	<input type="checkbox"/>		1	1	-
Business Administrator	1	<input checked="" type="checkbox"/>	-	-	-	-
Human Resources Specialist	1	<input checked="" type="checkbox"/>	-	-	-	-
Other <input style="width: 100px;" type="text" value="Budget Analyst"/>	-		1	1	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Maintenance Staff</b>						
Assistant Director - Maintenance/Operations	1	<input checked="" type="checkbox"/>	1	1	-	-
Maintenance Superintendent	1	<input type="checkbox"/>		1	-	-
Assistant Maintenance Superintendent	-	<input type="checkbox"/>		-	-	-
Maintenance Supervisor	1	<input checked="" type="checkbox"/>	-	-	-	-
Maintenance Crew Members	9	<input type="checkbox"/>		9	-	-
Fiscal Assistant/Time Keeper	1	<input checked="" type="checkbox"/>	-	-	-	-
Equipment Shop Staff	3	<input checked="" type="checkbox"/>	4	4	-	-
Other <input style="width: 100px;" type="text" value="Equipment Shop Foreman"/>	-		1	1	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Operations (Land Development) Staff</b>						
Traffic Engineer	1	<input checked="" type="checkbox"/>	2	2	-	-
Jr. Traffic Engineer/Tech	1	<input checked="" type="checkbox"/>	-	-	-	-
Permitting Specialist	3	<input checked="" type="checkbox"/>	2	2	-	-
Combined Traffic Eng./Permit Spec.	-	<input type="checkbox"/>		-	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Core Construction Staff</b>						
Assistant Director - Construction	1	<input checked="" type="checkbox"/>	-	-	-	-
Engineering Techs/Designer	1	<input checked="" type="checkbox"/>	-	-	-	-
Construction Project Manager	1	<input checked="" type="checkbox"/>	-	-	-	-
<b>User-defined Construction Staff</b>						
Surveyor	-	<input type="checkbox"/>		-	-	-
ROW Specialist	-	<input type="checkbox"/>		-	-	-
Utilities Specialist	-	<input type="checkbox"/>		-	-	-
Environmental	-	<input type="checkbox"/>		-	-	-
Materials & Testing Specialist	-	<input type="checkbox"/>		-	-	-
Traffic Engineer	-	<input type="checkbox"/>		-	-	-
Senior Inspector	-	<input type="checkbox"/>		-	-	-
Junior Inspector	-	<input type="checkbox"/>		-	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
Other <input style="width: 100px;" type="text"/>	-		-	-	-	-
<b>Total Staffing</b>	<b>29</b>			<b>24</b>	<b>2</b>	<b>-</b>

\*Sum of input county and outsourced FTEs can not exceed FTE requirement/Input number of FTEs



# James City County Devolution Analysis Report

## Feasibility Model for Secondary System Assumption v1.0

Version: JCC All Functions

County: James City

Scope of Analysis: Maintenance, Construction, and Operations

Devolution Start Date: FY 2009

Date of Analysis: 2/28/2007

Today's Date: 3/5/2007

User: craig secrest

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Equipment Outputs	Facilities Outputs
------------	----------------	-----------------	-------------------	------------------	--------------	-------------------	--------------------

### Staffing Needs Forecast

Position Description	FTEs Requirements	FTEs Filled w/ Existing Co. Staff	Outsourced FTEs	Additional Staffing Needs
<b>General Management</b>				
Transportation Director	1	1	-	-
Administrative Support	1	-	-	1
Chief Engineer (optional)	-	-	-	-
Contracts Administrator	1	1	-	-
Business Administrator	-	-	-	-
Human Resources Specialist	-	-	-	-
Other <input type="text" value="Budget Analyst"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Maintenance Staff</b>				
Assistant Director - Maintenance/Operations	1	-	-	1
Maintenance Superintendent	1	-	-	1
Assistant Maintenance Superintendent	-	-	-	-
Maintenance Supervisor	-	-	-	-
Maintenance Crew Members	9	-	-	9
Fiscal Assistant/Time Keeper	-	-	-	-
Equipment Shop Staff	4	-	-	4
Other <input type="text" value="Equipment Shop Foreman"/>	1	-	-	1
Other <input type="text"/>	-	-	-	-
<b>Operations (Land Development) Staff</b>				
Traffic Engineer (ops)	2	-	-	2
Jr. Traffic Engineer/Tech	-	-	-	-
Permitting Specialist	2	-	-	2
Combined Traffic Eng./Permit Spec.	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Core Construction Staff</b>				
Assistant Director - Construction	-	-	-	-
Engineering Techs/Designer	-	-	-	-
Construction Project Manager	-	-	-	-
<b>User-defined Construction Staff</b>				
Surveyor	-	-	-	-
ROW Specialist	-	-	-	-
Utilities Specialist	-	-	-	-
Environmental	-	-	-	-
Materials & Testing Specialist	-	-	-	-
Traffic Engineer	-	-	-	-
Senior Inspector	-	-	-	-
Junior Inspector	-	-	-	-
Other <input type="text"/>	-	-	-	-
Other <input type="text"/>	-	-	-	-
<b>Total FTEs</b>	<b>24</b>	<b>2</b>	<b>-</b>	<b>22</b>





# James City County Devolution Analysis Report

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC All Functions  
 County: James City  
 Scope of Analysis: Maintenance, Construction, and Operations  
 Devolution Start Date: FY 2009  
 Date of Analysis: 3/27/2007      Today's Date: 3/27/2007      User: Craig Secret

Intro Page	General Inputs	Staffing Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs	Facilities Outputs
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## Facilities Inputs

**Part I: Maintenance/Operations Facilities**

**Select Area Headquarters (AHQ) Driver**  
 Default Number of Area HQs:       **Number of AHQs**:       **AHQ Build-out Requirement\***:

\*Note: counties should consider the availability of surplus VDOT AHQs.

Build-out Costs	Default # of Elements	Adjust Need	Input Need	Default Cost Per Area HQ (2005 \$)	Change Cost Basis	Input New Costs
Land Cost (9 acre lot)	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 810,000	<input type="checkbox"/>	
Yard Build-out Cost	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 1,200,000	<input type="checkbox"/>	
Buildings Cost	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 922,500	<input type="checkbox"/>	
Chemical Facilities	<input type="text" value="1"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$ 230,000	<input type="checkbox"/>	
Other	<input type="text" value=""/>	<input type="checkbox"/>	<input type="text" value="-"/>		<input type="checkbox"/>	\$ -

Input cost basis component cost changes in 2005 \$.

**Part II: Construction Facilities (Office Space)**

**Office Space Options**:       **Select Office Space Driver**:       **Number of sq ft Required**:

**Office Space Cost\***:       **Default Cost Per sq ft**:

\*Note: enter costs in 2005 dollars; Office space input only applies if purchasing/building office space.

**Feasibility Model for Secondary System Assumption v1.0**  
 Version: JCC All Functions  
 County: James City  
 Scope of Analysis: Maintenance, Construction, and Operations  
 Devolution Start Date: FY 2009  
 Date of Analysis: 2/28/2007      Today's Date: 3/5/2007      User: craig secret

Intro Page	General Inputs	Staffing Inputs	Facilities Inputs	Equipment Inputs	Cost Outputs	Staffing Outputs	Equipment Outputs
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## Non-recurring Facilities Cost Estimate

Maintenance Yard Costs	Cost/Area HQ	Total Cost	Office Space Requirements
Land	\$ 911,662	\$ 911,662	Number of sq ft: <input type="text" value="-"/>
Yard Build-out	\$ 1,350,611	\$ 1,350,611	Office Space Cost: <input type="text" value="\$ -"/>
Building Cost	\$ 804,739	\$ 804,739	
Chemical Storage	\$ 258,867	\$ 258,867	
Other	\$ -	\$ -	
<b>Total Costs</b>	<b>\$ 3,325,879</b>	<b>\$ 3,325,879</b>	